

A vibrant street scene in the Philippines, likely in a city like Cebu or Manila. The street is filled with various vehicles, including a prominent red jeepney in the foreground with a license plate '1930' and a bumper sticker that says 'I LOVE MUSIC'. Other vehicles include a blue jeepney with license plate '1557' and a motorcycle. The background shows lush green trees and buildings, with a large white 'C' and 'T' overlaid on the image. The overall atmosphere is one of a bustling, everyday life in a tropical urban setting.

CT

2016

STUDYING
PUBLIC
LIFE IN THE
PHILIPPINES



CITIES IN TRANSITION 2016

STUDYING PUBLIC LIFE IN THE PHILIPPINES

Cities in Transition - Master's Course
Urban Design

Department of Architecture
School of Arts, Design and Architecture
Aalto University

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This book encompasses studies
done in a semester long studio
course based on the Philippines.

A compilation of information
gathered, site analyses, and projects
that follow, make this publication a
tool for future studies in Tagbilaran.

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RELEVANT INFORMATION

ANALYSES

STUDIO PROJECTS

OTHER

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ACKNOWLEDGEMENTS



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Charlotte Nyholm (Architect SAFA)
& Taru Niskanen (Architect SAFA)

LEFT | Traces of graffiti by “Shokita” left in various parts of the city
Photo by Antuané Nieto-Linares

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INTRODUCTION



LEFT | Photo by Sophie Regal

The Cities in Transition Studio course has run at Aalto University (Aalto) under different names since 1993. In previous years the field trip, which forms an essential part of the course, has taken students to Senegal, Benin, Cambodia and Tanzania. The course aims to teach students about the environmental, economic and socio-cultural impacts of architecture and urban planning. Collaborating with universities, NGOs and municipal and national authorities helps students gain a broader understanding of the local context, but also aims at long-term capacity building in the host country. Each year the course takes on real life cases in a city in the developing world.

2016 was the second year that Cities in Transition collaborated with Nagoya Institute of Technology (NIT) from Japan focusing on Bohol Island in the Philippines. Students delved into urban planning challenges in the fast growing city of Tagbilaran that faces frequent natural disasters. Data collection and analysis were conducted during a field trip hosted by Bohol Island State University (BISU), after which students continued their design work in Finland and Japan.

This book is divided into three main parts focusing on background research done before the trip, site analysis conducted in Tagbilaran and the design projects developed in response to the issues uncovered. It serves as documentation of a design process as well as providing methods and ideas for those interested in replicating a similar study.

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SUSTAINABLE GLOBAL TECHNOLOGIES COURSES

Antuané Nieto-Linares, Lotta Nylund

STATE OF THE WORLD AND DEVELOPMENT

FALL 2015 | PERIOD I | 2 CREDITS

This course was the first of two mandatory courses to prepare our group for the Cities in Transition studio during the Spring 2016 term. The course provides an introduction to world issues, focusing on developing nations, while highlighting the environmental, social and economical aspects of sustainability. Furthermore, it explores the dilemma of development from different perspectives.

The structure consists of 10 lectures with various guest speakers, all exploring the themes of the course from their own fields and experience. The lectures were versatile, featuring speakers from UNICEF, Ministry for Foreign Affairs of Finland, Geological Survey of Finland as well as professors, doctors and researchers from various universities in Finland. This gave us widespread insight on the state of the world and different perspectives on humanitarian aid and sustainable development.

Lectures covered themes like development policy & development aid, poverty, climate change, urban development and human rights focused in children. This gave us good insight on the complexity and contradictions within the tasks of improving the state of the world and achieving sustainable development schemes for different regions.

As this course was a preparation course for other studios, those who were interested in joining the Cities in Transition studio concentrated on the Philippines in their course blogs. We were able to read and comment on other participants' blog posts and thereby discuss the lectures' themes further.

SUSTAINABLE GLOBAL TECHNOLOGIES, CHANGING COURSE

FALL 2015 | PERIOD II | 5 CREDITS

The Sustainable Global Technologies, Changing Course, was the second mandatory preparation course for the Cities in Transition studio and was more interactive than the previous course. Guest speakers were invited to talk about different themes, such as tourism, sanitation & waste and natural hazards. All seminars focused on human rights and sustainable development and engaged the class with interactive assignments.

During these workshops we faced different problems that needed solving, presentations on different case studies, role-play-games were where we were introduced to different actors in a set society or development problem and later representing them through debates and negotiations. These interactive assignments gave us a deeper involvement in the themes presented and insight in the challenges of negotiating for a just compromise when many parties are in difficult positions or mistrust each other.

The assignments were constructed as team or pair work to give us practice in multidisciplinary collaboration and to prepare us for essential teamwork skills that would be needed when later divided into separated studios operating in different regions in the world. This course was more concrete on the problems it tackled and solutions it helped us formulate. Many of the participants during the course were already establishing different perspectives on sustainable development that were on a personal level more intrigued. These foundations would later show in our separate projects during the studios that followed.

BOOK REVIEWS

A PATTERN LANGUAGE BY CHRISTOPHER ALEXANDER

Reviewed by Fabio Latino, Johanna Marttila

A Pattern Language: Towns, Buildings, Construction by Christopher Alexander was published in 1977. The book was created to work as a manual, providing a language, a tool for anyone to tackle design problems from large scale planning of cities to small-scale building details. A guided design-thinking process helps one to understand, read and design good quality built environments.

The language is composed of patterns that describe a design problem and a core of its solutions. Each pattern is connected to larger and smaller scale patterns and they can be combined with each other in countless ways, to form a language that is specific to its user but readable by others.

The patterns help to map complex situations by discovering issues and their connections bit by bit. Solutions are presented in a general and abstract way, to allow the user of the book to adapt them to their preferences and specific conditions. The aim is to find universal qualities, the essential problems and solutions that can be applied everywhere.

Forming the language was a counter reaction to design methods of the time, criticizing the state of architectural design language, and aiming to create a departure point for its improvement. 1 Today, almost forty years after its publication, A Pattern Language is one the best selling architectural books in the world.2 Pattern theory has reached many different fields of application, spreading from the tangible world of architecture to the immaterial world of computer- and social sciences.

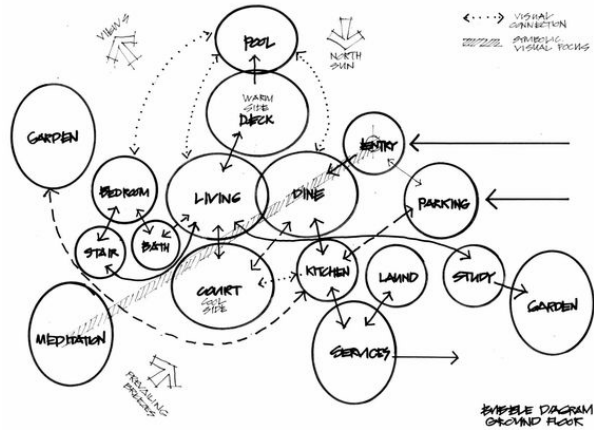


Diagram taken from A Pattern Language, showing the connections between different daily activities and spaces

LIVABLE STREETS BY DONALD APPLEYARD

Reviewed by Janne Salo, Lotta Nylund

What is the role of street? Are streets for living, for traffic or for business? If you could change one thing about your home street, what it would be? Who is responsible for the street environment? These were the question that arose from reading the book and the same questions were also asked from the audience when presenting the book at Bohol Island State University.

Streets have always acted as connections to the outside world. Modern inventions – such as cars – have fundamentally changed the role of the street from center of life to a mere path between home and something else.

“Livable streets” by Donald Appleyard covers the role of streets in the urban context. It is based on observations gathered from studies, interviews with local residents, and observation made of pedestrian and traffic activities. These findings are then presented under two main themes: life that takes place in the streets and livable streets

The first theme covered in the book is a description of life that takes place in the streets. This is done by observing the networks of social connections and interactions, and mapping areas perceived as home territory on streets of various scales.

The second theme covered in the book focuses on how to make streets livable. Suggestions discussed in the book are focused on approaches to control traffic flow on the streets by controlling speeds and volumes. Also tools to increase pedestrian priority and safety are discussed. Attention is also paid to mitigating noise and emissions.

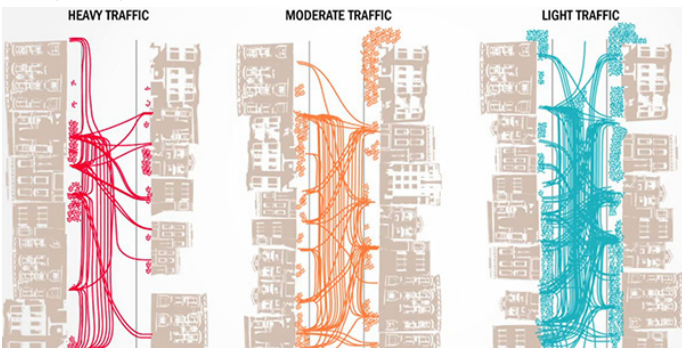


Diagram taken from Livable Streets, showing how social use of the street and the amount of traffic is correlated

GREAT NEIGHBORHOOD BOOK

BY JAY WALLJASPER
Reviewed by Hannele Cederström, Kiira Piironen

“The people who live in a particular locale are the experts on that place.”

The Great Neighbourhood Book introduces many encouraging stories how a change has been made in various neighbourhoods. Home and neighbourhood are integral parts of everyone’s lives, basic units of human civilization, and thus it is important for them to be enjoyable. These stories show that local people are experts of their surroundings and they have the power to make a difference in their neighbourhoods. Spending time in and watching how people use a place helps to find the spaces with most potential.

One example of elements of lively and safe neighbourhoods are spaces where people can spontaneously gather. Bringing more life to streets and front yards brings more interactions between neighbours, and more eyes monitoring the street to increase safety. A bench on a street can be an important meeting point of a neighbourhood, for example. Simple gestures such as planting flowers can create a feeling that someone is taking care of the environment. Small gestures can finally have the biggest impact.

There are some things that all good places have in common: they are safe and accessible, they promote sociability, they offer things to do, and they are comfortable and attractive. These qualities cannot be achieved alone: the key is to work together and care. Many of the actions can be relatively small, without the need for huge investments, and can easily be adapted to a community with limited resources.



Drawing from Greate Neighborhood Book. Neighbors in Conover Commons in Redmond, Washington share an open field as their community gathering spot.

CITIES FOR PEOPLE

BY JAN GEHL
Reviewed by Antuané Nieto-Linares, Sophie Regal, Théophile Paquet

As the title suggests, this book offers a very human point of view on urban planning ideologies. In “Cities for People” Jan Gehl explains the relation of people to the built environment and how we perceive different spaces as humans. He takes into account the current changes in demographics and lifestyles to find ways for better urban planning starting at from a very small scale and basing solutions on our five senses. He also disserts about the relation buildings have with the urban context, and how they “meet” the city. Gehl also discusses successful and failed strategies in urban planning.

The author identifies mobility and housing as the two big variables in his recipe for a “lively, safe, sustainable, and healthy city”. In the final chapter, Gehl makes a plea for a city planned for a human scale, especially in the fast growing cities in developing countries. In his book, Gehl shares the tools he uses to reconfigure inhospitable cityscapes to fit the needs of the people. “Cities for People” serves as proof that lively cities can be achieved through comprehensive planning.

	1900 Old city areas	2000 New city ares (high density)	2000 New city ares (low density)	2000 New city areas (suburbs)
Average size of household	4 people	1.8 people	2 people	2.2 people
Average dwelling area per resident m²/sq. ft.	10/110	60/650	60/650	60/650
Floor to plot ratio	200%	200%	25%	20%
Number of dwellings per hectare	475	155	21	8
Number of residents per hectare	2,000 persons	280 persons	42 persons	17 persons

Drawing taken from Cities For People. New residential areas re sparsely populated. A century ago seven times more people lived in the same amount of space.

FIELD TRIP

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FIELD TRIP



Year 2016 is the second time that Cities in Transition has collaborated with Nagoya Institute of Technology from Japan focusing on Bohol Island in the Philippines. Data collection and analysis were conducted during an intense two week field trip hosted by Bohol Island State University in January, after which students continued their design work back in Finland until May.

This year, attention was paid particularly to studying public life and urban qualities in the city of Tagbilaran and assessing traffic and walkability. As foreigners we don't know how the city works, how people live, work and move about in Tagbilaran. How do public life and public space interact? We wanted to learn from Tagbilaran.

The two-week obligatory field trip is an important part of the course, as students need to experience local conditions and design context to reflect on the right issues. During the field trip the projects are outlined and material for the projects is gathered. Students are able to meet different stakeholders from informal settlers and street vendors to city and provincial government officials.

6

TEST WALKS

Johanna Marttila

TASK

Test Walks is a tool of spatial analysis introduced by Peter Bosselmann in the 1980's. He conducted short walks in various cities and used figure-ground maps of the site to study to compare the walks to each other. Test walks result as a good tool for discovering different factors and qualities or urban structure that affect perception and measurement of distances.

The task is to walk important routes of a city as an observer and note possible hindrances, obstacles and diversions on the way. A 12-point-criteria of designing and detailing good public spaces by Jan Gehl is used as a reference point for the spatial analysis. Each site and walk has been evaluated by the 12-point-criteria, marking successful examples with double plus (++) and problematic places with double minus (--). The most successful and problematic conditions are also highlighted with green and red colors.

CASE STUDY SITES

The seven chosen case study sites represent important transport, business, social and cultural nodes of Tagbilaran city. They are spread around the city in a way that transportation and new development nodes border the city, the social and cultural nodes are situated in the center and housing in between. Big streets surround all the important nodes and smaller pathways lead inside housing neighborhoods. Three of the areas represent the main transportation nodes of the city; the airport, the pier and the bridge leading to Panglao-island. Informal settlements are focused around the coastline and the city center hosts a mixture of housing, services and cultural centers such as schools and the city cathedral.



- A** AIRPORT
- B** INFORMAL SETTLEMENTS
- C** ICM, CPM, IBT
- D** CITY BLOCK
- E** PLAZA & CHURCH AREA
- F** BRIDGE & FISH MARKET
- G** THE PIER

GROUP WORK

An international group of 5 students overtook the task of conducting test walks in the city of Tagbilaran. They were to observe the different urban qualities of designated test walk areas. Each group member gained a specific role in the team:

- 1. Time- keeper - observing time
- 2. Mapper - observing distances
- 3. Two Reporters - observing the qualities of space
- 4. Photographer - observing the behavioral patterns of the walkers

The group decided to conduct five-minute walks in two different types of streets: in the big, main roads and in the smaller streets and pathways. The choice to study the two contrasting types of streets was made in order to discover the different qualities the single study areas might hold inside. At the end of each day the group compared the walks of the day with each other. Favorite and least favorite walks were chosen and conclusions were drawn from the daily analysis.

The 12-point-criteria of designing and detailing good public spaces by Gehl defines the framework for evaluating the walking conditions. The best and worst scores of each category are highlighted with green and red blocks and the overall score of positive and negative rates of each walk is counted, to find out the best and the worst scored walks of the day.

Consequently the best and worst rated walks are compared to the group analysis results of the day, to the favorite and least favorite walks of the day. This is done in order to draw conclusions on what and how are the urban qualities that contribute to the pleasantness of the walking experiences in the city of Tagbilaran. The analysis also looks into the walking distances carried out in meters, in length and in radius and compares the results to the urban qualities that impact on the perceived distance of the walks.

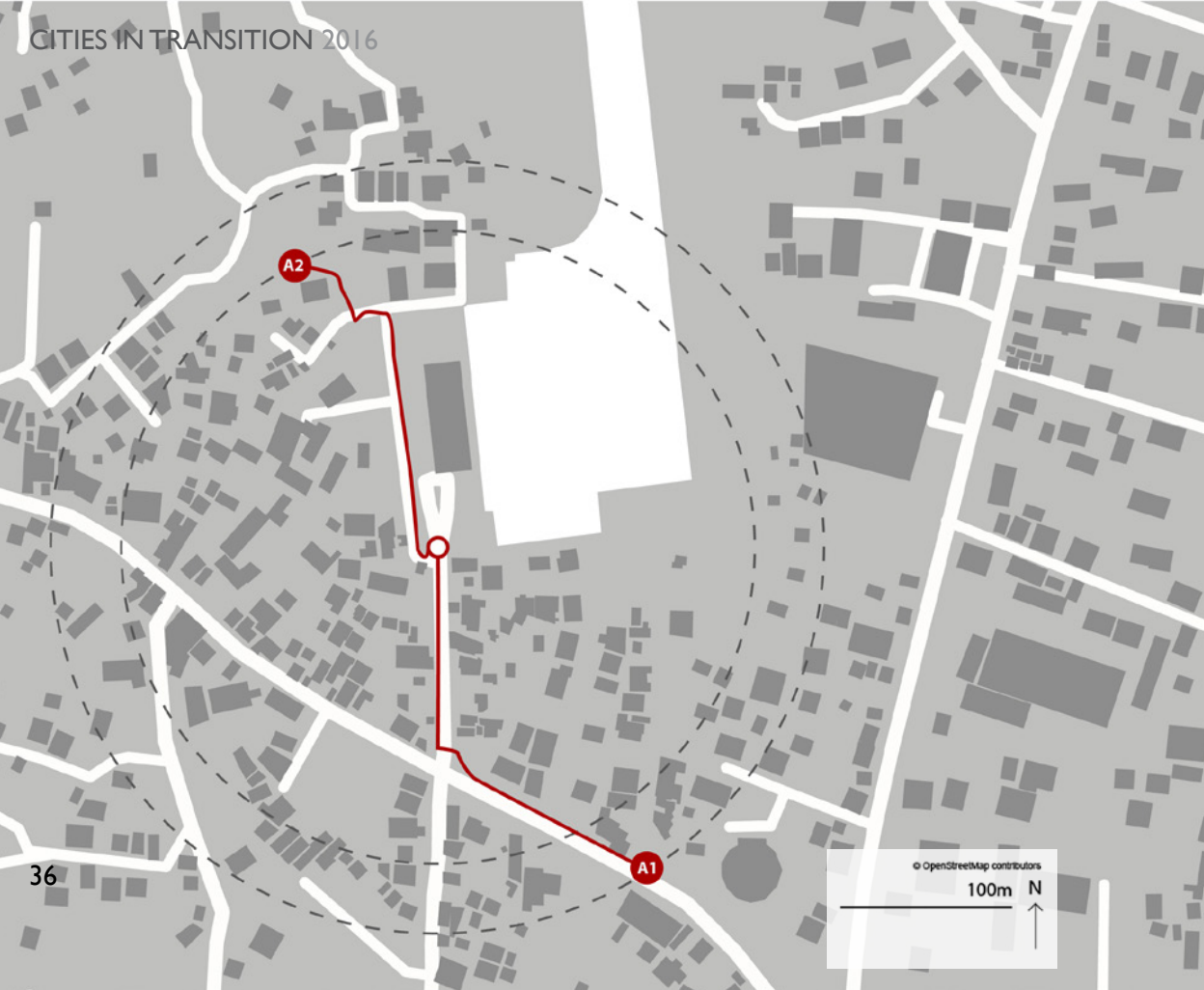
The aim of analysis was to gather information from conducting test walks in Tagbilaran from a “human and less formal perspective”. This analysis shares locally based, but globally applicable, known research method to a wider audience and it can potentially spur further discussion and investigation in the topic.

12 POINT CRITERIA

Protection		against traffic and accidents
		against crime & violence
		against unpleasant climate / against unpleasant sense experiences
Possibilities		for walking
		for standing
		for sitting
		to see
		for hearing / talking
Designing		of play / unwinding
		small scale services
		for enjoying positive climate elements
		for positive sense-experiences.

The 12 most important public space evaluation criterias, from “Cities for People” by Jan Gehl (2010), used in the above site analysis criteria.





ABOVE, FROM LEFT TO RIGHT | Walks A1 & A2 Photos by Sophie Regal



AIRPORT

THURSDAY / 14.01.2016 / 11:00 AM

A1 / MAIN ROAD / **LEAST FAVORITE**

When arriving to Tagbilaran airport with a plane, one will be immediately approached by several offers of transportation away from the city. **No one walks** very far from the airport. There is a covered sidewalk with small businesses along the road until the first turn of the street. Then **noisy cars** start to take over spreading fumes. The team members are the only pedestrians walking in the street. They form a queue right beside the vehicles rather than trying to catch the occasional strip of destroyed sidewalk. The **edge** between the gutter and the street is **not well defined**. One has to keep a constant eye on their feet, as there are water ponds and many level variations on the pathway.

The walking pace is calm, as there is **no escape in sight from the hot sun** reflected in the asphalt surface. There is little vegetation, possibilities to stop or places that cast shadows. There are **no services around** and all the properties are closed off from the streets by gates. The street ends nowhere for pedestrians and no one walks on it.



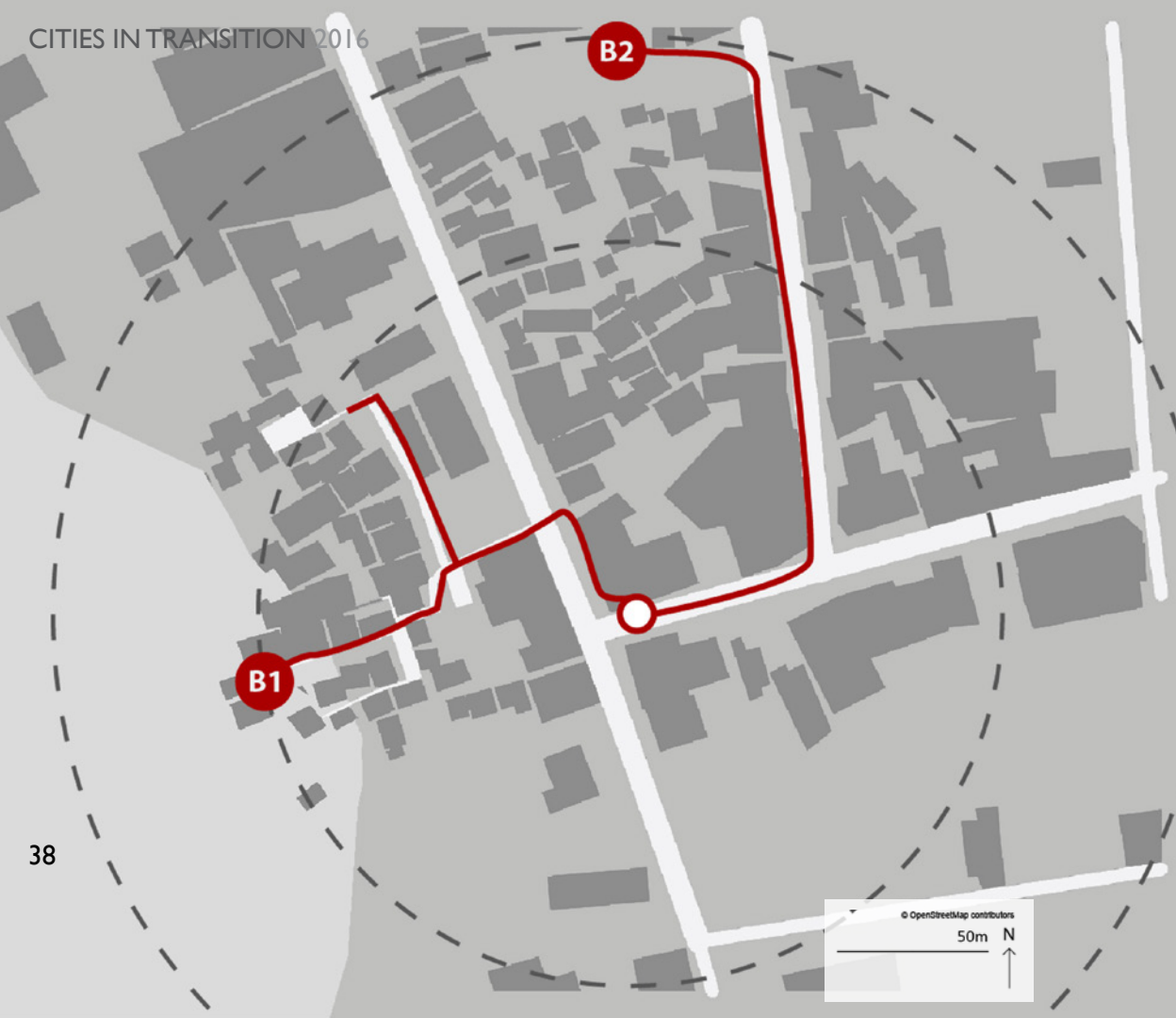
+ / - | FIRST PART / SECOND PART

First part referring to the road departing from airport, the second part refers to the road that continues after the first turn.

A2 / SMALL PATHWAY / **FAVORITE**

The side street seems quite closed off from the main road. It serves as a “back alleyway” for the airport but slowly turns into a more **private natural space**. The street has no gutters or sidewalks and the materials change from industrial materials to softer, more organic, materials. **Trees and houses along the pathway offer shade**. Walking pace gets faster as pathways get narrower and more private. Maybe outsiders are not supposed to be there. There is a feeling of losing directions when following the small winding paths. Suddenly the **pathways open up to a big community backyard**. There is a cow and a goat and a big wide green open space surrounded by little houses. There are some **local shops and stopping places along the small passages**. **Here walking precedes vehicles**. The Filipino team members are especially glad after taking this path. They feel they have discovered a new place in their city.





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ABOVE, FROM LEFT TO RIGHT | Walks B1 & B2 Photos by Sophie Regal

B INFORMAL SETTLEMENTS

THURSDAY / 14.01.2016 / 1:00 PM

B1 / SMALL PATHWAY / BEST SCORE

Access points to the informal settlements are not very visible, nor inviting. They go downhill leading below the street level. There is a smell of waste and trash due to the inadequate waste and sewage disposal systems. It is hard to see what is coming, as pathways are narrow and they go through some of the constructions. These self-made constructions lay on wooden stilts, running along the shoreline. Wooden passages go across the area leading into people's dwellings. It is unclear when public space becomes private which can make a visitor hesitant to walk further. The constructions seem both fragile and flexible. There is a **sense of community in the area**. People face the common pathways from their homes and spend time together. There is a tiny, ruined basketball court up against the hill and electrical wires running down the pathways. One has to keep a careful eye on each step, as no one wants to miss the narrow pathway and end up in the dirty water below.



+ / - | YES / NO

On the other hand yes, and on the other no.

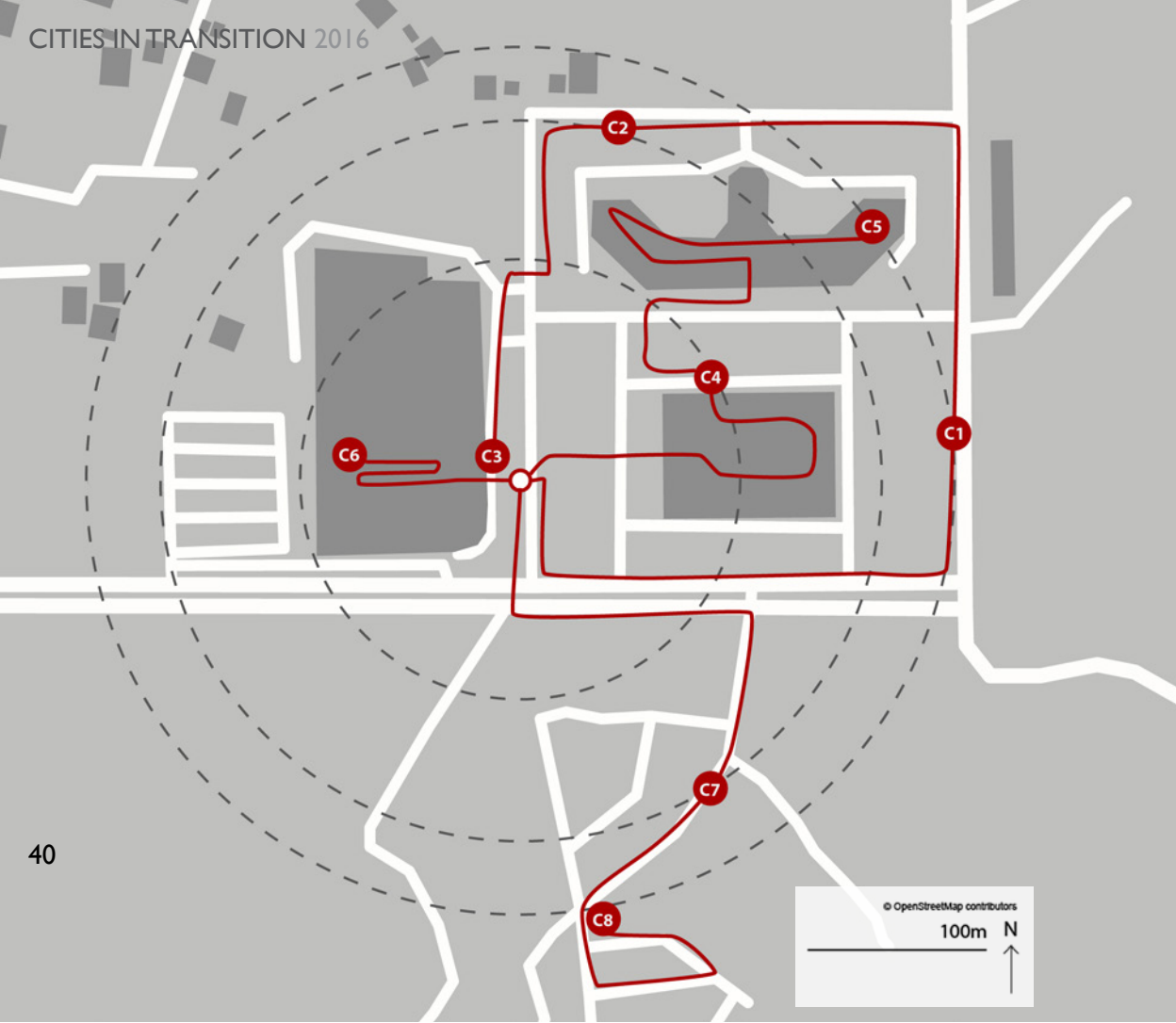
B2 / MAIN ROAD / WORST SCORE

For visitors it is challenging to cross the main roads of the city. There is a lot of **traffic and very few traffic lights**. A big road by the shore offers no shade but when taking a secondary street, shops slowly start to open up to the street. The surfaces are quite smooth and in some parts there are gutters and sidewalks. Shops are situated on a lower level, disconnecting these spaces from the street. **Most of the façades facing the street are closed off by gates** denying pedestrians from seeing or going further.



+ / - | BIG ROAD / SECONDARY STREET

First part refers to the big roads, second part to the secondary street



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C ICM+CPM+IBT
FRIDAY / 15.01.2016 / 10AM - 12PM

C1 / MAIN ROAD AROUND CPM (CENTRAL PUBLIC MARKET)

Here the main road is much wider than in the city center. There is quite a lot of traffic but sidewalks are wide with smooth and continuous surfaces. It is difficult to cross the road as there are no traffic lights. The pedestrian walkway is positioned quite far away from the market and bus terminal. Very few people use the walkway. It just seems to surround the site instead of connect the two buildings. There are some plant shops between the market, the pedestrian walkway, and a residential area on the other side of the street. When walking under the sun the road looks and feels long, but one gets much further than expected in five minutes.

C2 / MAIN ROAD AROUND IBT (INTEGRATED BUS TERMINAL) / LEAST FAVORITE

Part of the road is closed due to construction work. The construction site spreads **dust and fumes in the air** which makes the walk seem much longer. The walk ends on the backside of the bus terminal where there are constructed parking spaces which are rare in the city. They are empty cars but there is a man sleeping in a hammock enjoying the shade provided by surrounding trees.

C3 / MAIN ROAD AROUND ICM (ISLAND CITY MALL) / LEAST FAVORITE

Sidewalks around the mall are mainly used for parking or they are taken over by buses and tricycle drivers. A pedestrian bridge leads to the main entrance and a car ramp downstairs to more parking spaces. It is the **least interesting walk of the day, as this kind of context can be found anywhere in the world.**

C1												
C2												
C3	+	+	-	+	+	-	++	-	+	+	--	-

LEFT | ISLAND CITY MALL (ICM) Photo by Sophie Regal

C4 / SMALL PATHWAY THROUGH CPM

The street changes drastically from the smooth and waxed paving of the mall to a muddy ground around the market. Only the perimeter of the market is covered and paved with concrete. The main entrances are blocked by workers' vehicles. Late Friday morning is not a busy moment in the market hall. The busiest day is Tuesday. People arrive to the market to do their shopping at 6am. Now there are more sellers than customers in the stalls and none of them try to sell their products. There is poor air flow and many strong smells in the air. It is a relief to arrive to the outskirts of the market to catch a breeze of fresh air.

C5 / SMALL PATHWAY THROUGH IBT

The market extends until the bus terminal with stalls selling items for travelers. The terminal building is surrounded by hardware stores and businesses related to transportation. At this slow hour of the day bus drivers stop all entering people. The terminal offers a wide covered space with a pleasant breeze passing through. There are many seating and waiting areas and a restaurant section upstairs. The atmosphere is public and safe. The paving is smooth concrete but it gets muddy in the wet season as there is no proper drainage.

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BELOW | CENTRAL PUBLIC MARKET (CPM) Photo by Sophie Regal



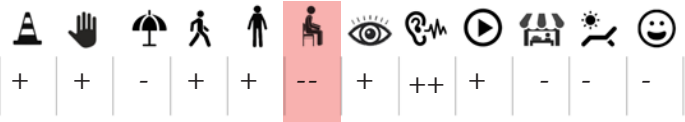
C6 / SMALL PATHWAY THROUGH ICM /
BEST SCORE

Ah, air-conditioning! People rush inside to the fresh malls but first they have to go through a quite superficial security check. A worker is cleaning up the shiny floor tiles from muddy shoeprints and people create new ones while strolling into the complex. There is music, less smells and noises than outside. There are many kinds of activities in the mall but none invite our group in. The mall is commercial and global in nature.



C7 & C8 / SMALL PATHWAY IN THE VILLAGE

A small terrain pathway parts from the main road and ends up in a small neighborhood consisting of Western style houses. The Filipino students criticize the usage of closed-off windows for being inadequate for the local climate. The area is very green and the local community has a small chapel positioned in the center of the neighborhood.



BELOW | INTEGRATED BUS TERMINAL (IBT) Photo by Sophie Regal





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D CITY BLOCK
FRIDAY / 15.01.2016 / 12 - 1PM

DI / MAIN ROAD / FAVORITE / WORST SCORE

There are **no pedestrian walkways**, just rocky sides of the street. The area is a mixture of commercial and residential. Some of them open up to the street on the ground floor and **provide a place for shade and stopping by**. There are a lot of **heritage buildings in the area**. Many are abandoned but still standing. There is also an American style townhouse of a former president. There are cars parked everywhere but limiting guiding restrictions prevent car traffic during school hours. It seems that there is **more wind, trees and open spaces than in the rest of the city**.

+	-	+	-	-	+	+	-	+	++	-	-

D2 / SMALL PATHWAY / FAVORITE / WORST SCORE

There is **no access to smaller pathways in the area**. The streets follow rigid grid system and private properties are fenced off from the street. There are **a lot of different types of shops and services and stopping places in the area**. There is a market place inside one of the blocks. There are no shoppers at this time of the day. The vendors are sleeping as it is siesta time.

+	-	+	-	-	+	+	-	+	++	-	-

LEFT | CITY BLOCK Photo by Sophie Regal



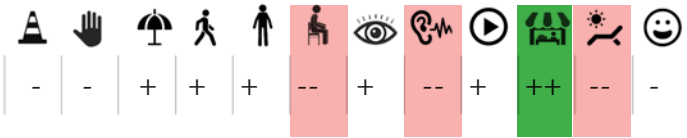
E PLAZA & CHURCH AREA
SATURDAY / 16.01.2016 / 9AM

E1 / MAJOR ROAD

The pedestrian walkway is busy with people and local sellers making the walking pace slower than usual. Sidewalks are taken over by vending stalls and vehicles. There is a lot of noise from the street and from the surrounding businesses. There is little wind, lots of car fumes in the air and hardly any vegetation. The sidewalk seems too small for a major road in the city.

E2 / MAJOR ROAD TO THE CHURCH

One can see the church already even when far from the main road. It is challenging to cross the road leading to the main plaza because it has become a sort of a roundabout for vehicle traffic. There are several layers of pedestrian pathways around the square and one big pathway through the square. In order to reach the cathedral one has to cross the road again. Today, at this hour it is still calm. On Sundays the area gets really busy when people come to mass. There is less car traffic on the sides of the church and there are vendors in the church's courtyard.



BELOW | CPG Road leading to Church and Plaza Photo by Sophie Regal



E3 / SMALLER PATHWAY AROUND THE CHURCH

A pathway around the church goes first through inner courtyards. Then it continues inside the administrative building until the back of the church into a terrace. The terrace has a great view over Panglao-bridge and it hosts the church's inner garden. The path continues again inside the building leading to the other side of the church. This side is the least polished and least used by the public.

E4 / SMALLER STREETS AROUND PROVINCIAL CAPITAL BUILDING / 10:20

The pedestrian walkway is raised up and separated from the street by flowerbeds. The walkway becomes wider when turning away from the main plaza. Behind the capital building of the city, the walkway becomes a covered gallery space decorated with an excessive amount of air-conditioning boxes. The sides of the building host financial and medical services and there is a city library in the back. In the library entrance it is advised that the public should go around the building instead of crossing through the inner courtyard. This space is currently used as parking for the local government officials.

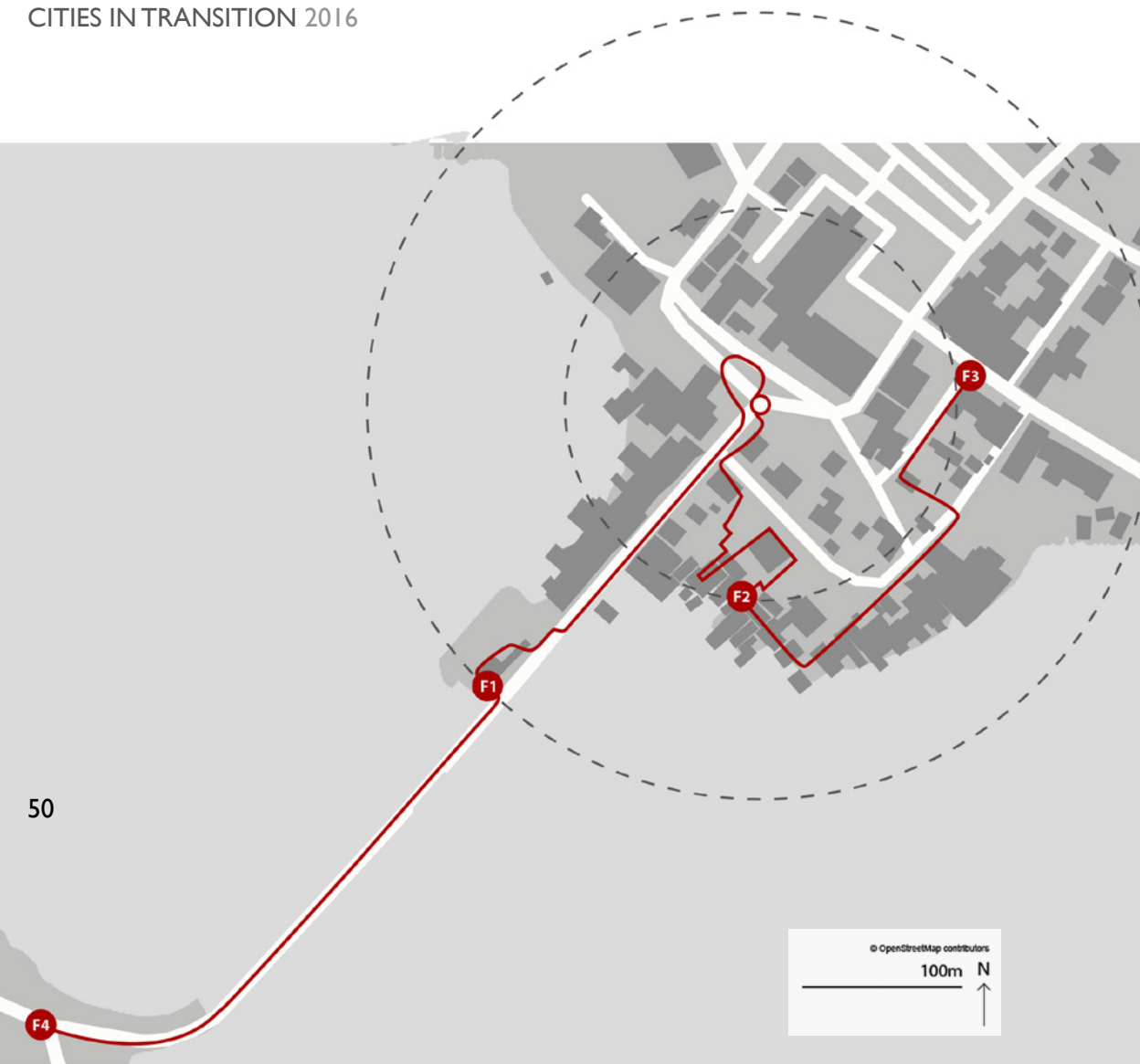
48



RIGHT | Church front Photo by Sophie Regal

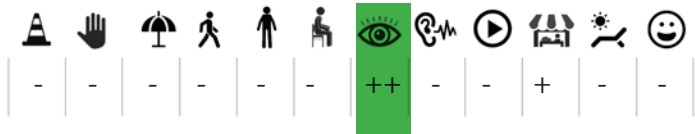


49
SATURDAY | 16.01.2016
TEST WALKS



FI / MAJOR ROAD

The busy road goes downhill and leads to a staircase that opens up a view over the Panglao-Bridge. The sea is initially invisible from the bridge as both of its sides are constructed. The smell of fish is strong, even though the fish market activity time is long gone. The market opens daily early in the morning since at the current time it is too hot and there is not enough shade for pedestrians. The Filipino students confirm that they would never walk across the bridge. It is too uncomfortable.



F2 / SMALL PATHWAY IN INFORMAL SETTLEMENTS BY THE BRIDGE / FAVORITE / BEST SCORE

Smaller pathway brings us to a small community square of informal settlements. There is a flooded, self-made sport field, a stage and a heritage building. The streets are bare and there are leaking water pipes running along the walkways. The group is unsure which way to go as they start losing direction after several turns in the narrow paths.

BELOW LEFT & RIGHT | Informal settlements by the bridge & major road leading to the fish market. Photos by Sophie Regal



F BRIDGE & FISH MARKET
SATURDAY / 16.01.2016 / 9AM
SUNDAY / 17.01.2016 / 5.30AM

F3 / SMALL PATHWAY FROM SETTLEMENTS TO MAIN ROADS

It feels like walking through a village far away from the city. There is a lot of vegetation in the area, there are less people and they seem to have bigger, more spacious houses and gardens than in the city center. The area is composed solely of residential buildings. The community has common public spaces and there is a sense of a more relaxed lifestyle. The sea is never visible due to the vegetation, construction and changes in level of the terrain. The same elements block the sound of the city from the neighborhood. On the way back, the group needs to take a detour – in the road ahead there are sink holes that collapsed during the 2013 earthquake.

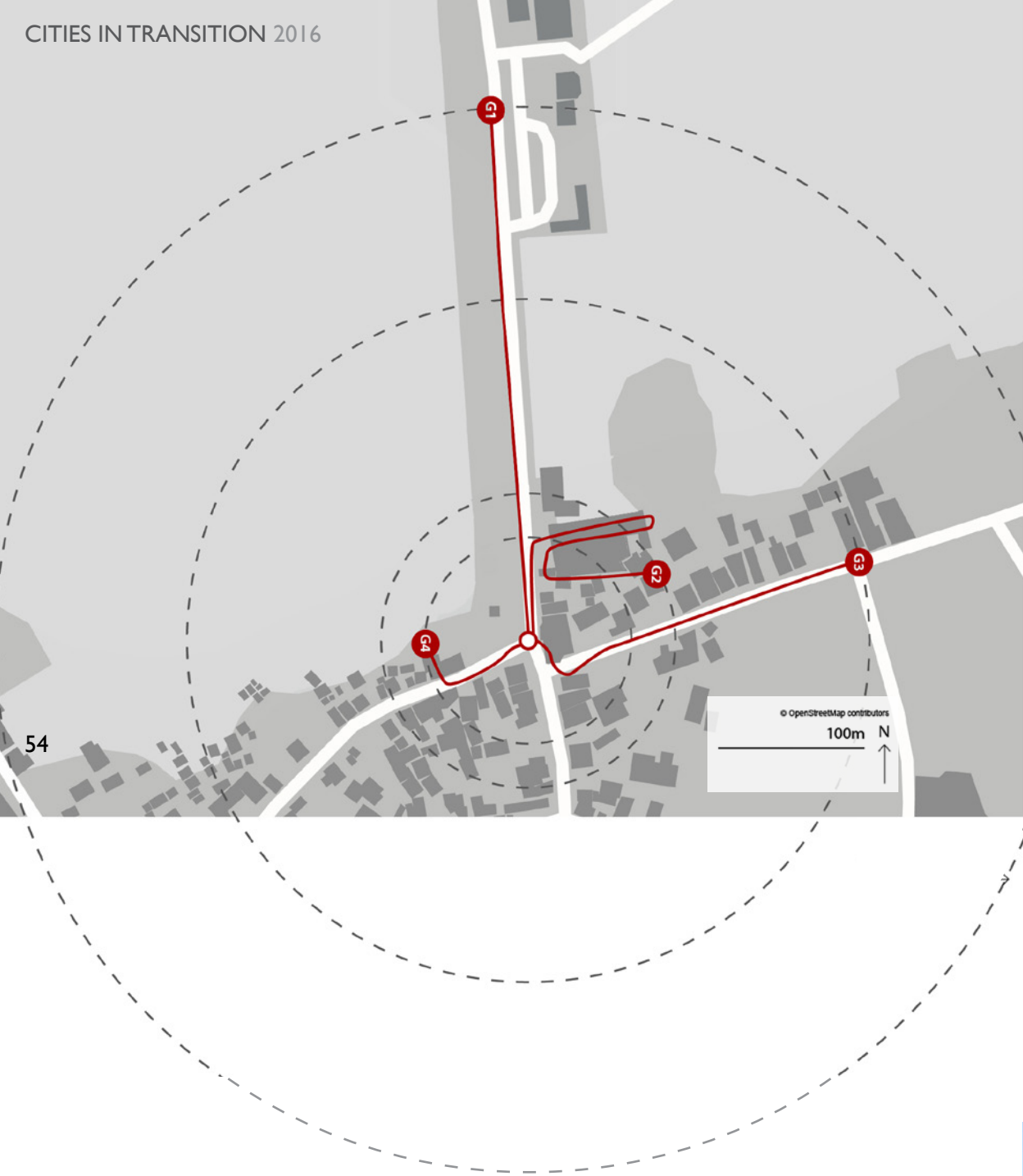


F4 / PANGLAO BRIDGE / SUNDAY

When visiting Panglao Bridge during the morning one can experience the local fish market activities. The area is so small that one can walk through it calmly in five minutes. The floor is wet and there are fish stands everywhere. The vendors get louder as more people pour in with motorcycles, bicycles and by foot. It is the only time of the day to see people jogging or riding bicycles in Tagbilaran. The air is fresh, there is a beautiful sunrise reflected on the sea and one can hear people singing in the mass on both sides of the surrounding islands.

RIGHT | Fish market on Sunday morning
Photo by Sophie Regal





GI / MAIN STREET TOWARDS THE PIER / LEAST FAVORITE / WORST SCORE

A very wide and hot street brings us to the end of the pier. There is **no shade or pedestrian walkway**. There are some trees but they are positioned in the middle of the two driveways. There are on-going construction works on the pier which got badly damaged during the 2013 earthquake. They are remarkably raising the street level and there is a lot of **dust and noise due construction**. **No one is walking on the bridge**. Everyone comes and leaves the pier with a vehicle. Currently there is one terminal in use and another under construction. The group agrees that the new terminal looks like a fast food place.



G2 / SMALL PATHWAY AS A NEIGHBORHOOD

Smaller bamboo pathways on stilts depart from the pier towards the sea. They lead first to a restaurant and a shop space and then to the housing area in the back. These small closed ended-streets are called neighborhoods. The constructions are mainly made out of organic and inexpensive materials. One just has to stop to admire the ingenuity of some of the self-build solutions. On their only hard piece of land, right next to the pier, the community has set up a garden where they grow herbs and onions.



LEFT CLOCKWISE | Bridge and pier from walks
F2 & G4. Pier view from walks G1 & G3.
Photos by Sophie Regal

G PIER
SATURDAY / 16.01.2016 / 1.30PM



G3 / MAIN ROAD ALONG THE SHORELINE / LEAST FAVORITE

There are no smaller pathways leading to the shore. The group ends up in the big road along the shoreline, which is full of **traffic fumes, noise and dust**. It is **exhausting to walk in the hot street** even though pedestrian pathways and shadow are occasionally provided. The **street is mainly used by vehicle traffic and parking**. Houses are closed off to the streets and there are **few services** in the area.

G4 / SMALLER PATHWAYS IN THE SHORE / FAVORITE

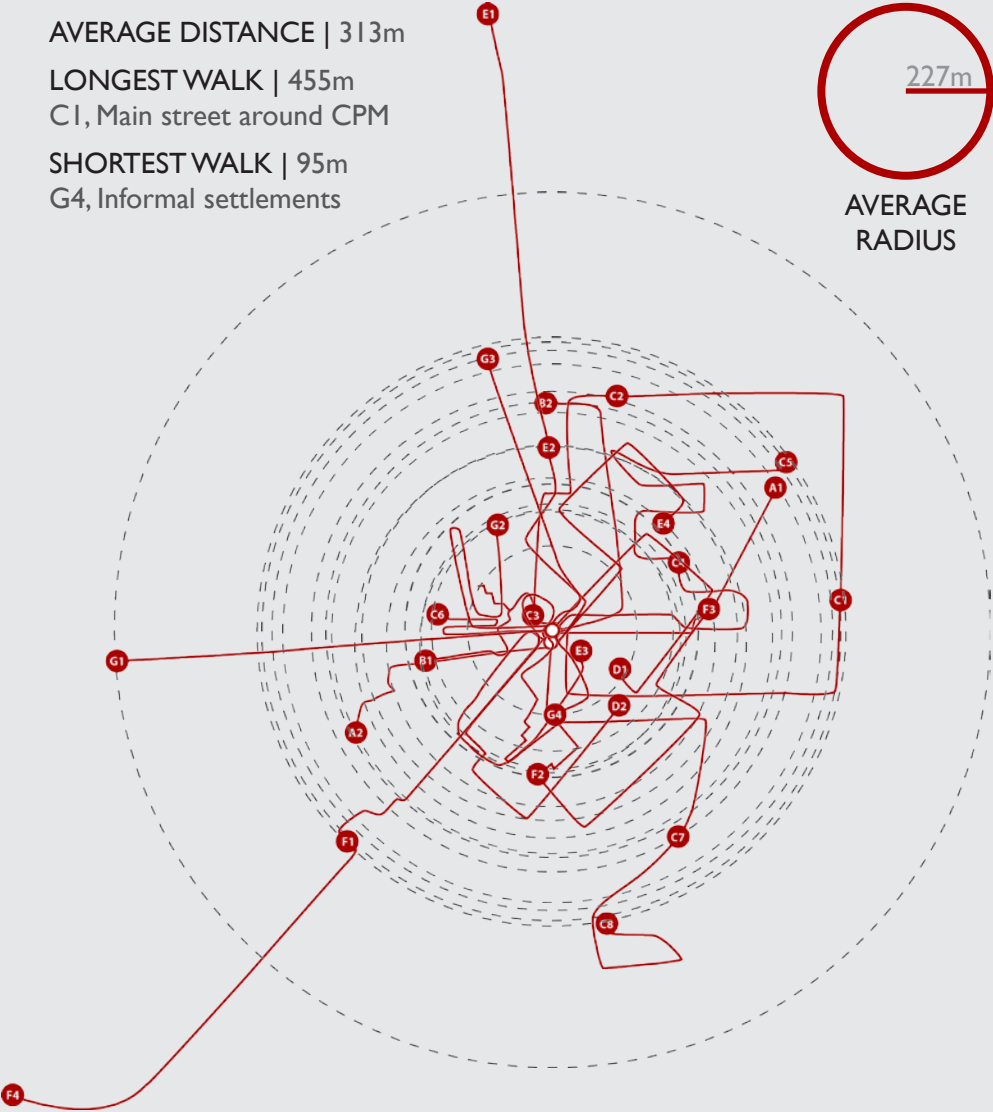
Finally an **entrance to the shore** through a very steep staircase is found. It brings to a lower ground level and it is a home of a small community. There are **no signs of the adjacent traffic**. Birds are singing and the constructions lie in the midst of mangroves. This settlement is in worse conditions than some others around but it is very **peaceful and beautiful** in its own way. It is like a fragile patchwork of man and nature works of art. There is a **breeze of air from the sea** and at the end of the walking passage a **beautiful view** opens up to the sea. Suddenly the group notices that there is a man just behind them, sleeping in a hammock.

RIGHT | Informal settlements by the shoreline.
Photo by Sophie Regal



DISTANCE ANALYSIS

AVERAGE DISTANCE | 313m
LONGEST WALK | 455m
C1, Main street around CPM
SHORTEST WALK | 95m
G4, Informal settlements



- A AIRPORT A1 | A2
- B INFORMAL SETTLEMENTS B1 | B2
- C ICM, CPM, IBT C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8
- D CITY BLOCK D1 | D2
- E PLAZA & CHURCH AREA E1 | E2 | E3 | E4
- F BRIDGE & FISH MARKET F1 | F2 | F3 | F4
- G THE PIER G1 | G2 | G3 | G4

GENERAL FINDINGS

The favorite streets were the smaller pathways that felt far away from the city. These pathways have a sense of community and identity, as they pass right across neighborhoods, among their self-made dwellings, cultural heritage buildings and small communal spaces. The idea of the countryside is reflected through the presence of vegetation, bird-singing and in the informal land art made by the dwellers. A more human scale and mixed-use of an area contributes to the pleasantness of the walks.

The least favorite walks were along the main roads. The main roads occasionally provide sidewalks and shade but these are often disturbed by obstacles, such as differences in level, electricity poles, wires and parking spaces. The main issue along the main roads was with the overall sensory-experience. When present, natural elements such as ventilation provided by the sea can significantly decrease the effects of negative sensory elements of the city.

A surprising finding was that the favorite walks were conducted in places the group members would not usually walk in. Discovering these pathways made the group excited and made them want to adventure more. These pathways also offered the group surprise factors with the winding pathways, differences in scale of consecutive spaces and with the changes in levels in the landscape. It is the surprise factor that attracts people but also prevents them from entering these pathways.

The chosen walks were rarely straight. The longest one (C1) follows a big straight road where a wide pedestrian paving is provided. The experience is uncomfortable due to the climate conditions and it leads to a faster walking pace and longer perception of distance and time. The shortest walk (G4) is in the middle of the informal settlements where many of the pathways twine around, end up in private dwellings and have limited accessibility. In the big roads, under the sun and in the middle of the traffic fumes, the walks seemed everlasting. When lost in the smaller pathways, however, time seemed to run out.

The group found test walking as a great tool to study and observe how urban qualities impact the walking experiences in the city. The overall conclusions of the study are that the main roads were not pedestrian friendly as they are designed for vehicles and the smaller pathways lack in adequate infrastructure. This leads to the prevalent condition that people prefer not to walk in Tagbilaran.

SITE ANALYSES



METHOD

Site analyses were conducted by students while exploring and experiencing the city: walking around, making notes, taking photographs, sketching, using common sense and all their five senses. The key question was: Is this the kind of city we want?

The site analysis methodology is based on Jan Gehl’s public life studies. Seven key areas of the city were identified based on the broad range of different situations within the city that they represent: some are traffic nodes, some commercial or cultural centers, others are places where major change is about to happen in the future and some represent typical blocks, settlements or scales. These seven key areas were analyzed using tools such as counting, mapping, tracing, looking for traces and test walks. Students were divided into mixed groups of three or four people.

TRACING AND MAPPING

“Mapping: Activities people, places for staying and much more can be plotted in, that is, drawn as symbols on a plan of an area being studied to mark the number and type of activities and where they take place. This is also called behavioral mapping.” (Gehl and Svarre, How to study public life)

“Tracing: People’s movements inside or crossing a limited space can be drawn as lines of movement on a plan of the area being studied.” (Gehl and Svarre, How to study public life)

Every member in the team had their own map of the research area. Location, date, time, weather conditions and agreed signs for different activities were noted on the maps. The team members were spread out to mark their observations in a 15 minute interval. The team met up and merged all their separate drawings into one map that covered the whole area.

FINDING TRACES

Traces are indirect signs of informal activities and about how people are using the spaces. The research was conducted each time similarly which consisted on walking around, photographing, drawing, and writing notes. Findings were signaled on a map at the end of the day.

TRAFFIC COUNTING

During initial analysis, traffic flow was observed on-site and street or path network was investigated with maps or observations. After initial analysis, a notable or relevant intersection, or road segment, was chosen. Depending on the characteristics of the network (pedestrian or vehicle) a set of categories was chosen. The purpose for this was to provide additional classified variables for further analysis. Some categories were combined in data-analysis.

Each person was assigned a location for counting for 10 minute intervals and all observations for the selected point of counting began at the same predetermined time. For special locations (i.e.: Informal Settlements) counting time was extended to 20 minutes due to the low flow. Afterwards, statistics were gathered in one place and stored for further analysis.

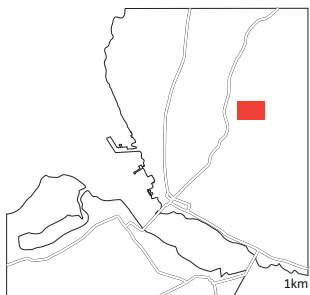
The categories were the following:

PEDESTRIANS

- Gender
(male, female)
- Age-group
(child, middle-aged, elderly)
- Position
(sitting, standing, moving)

VEHICLES

- Cyclists
- Tricycles
- Motorcycles
- Cars
- Vans
- Jeepneys
- Buses
- Trucks
- Heavy Trucks



ICM, CPM, IBT

Lotta Nylund

The Island City Mall (ICM), Central Public Market (CPM) and Integrated Bus Terminal (IBT) are located inland, northeast of the city. More precisely, about 3km from the plaza and city center along the J.A. Clarin Road, which is the shortest route and one of the two biggest roads in the municipality.

There are three ways of transportation from the city center to the site: private car, tricycle (one-way / 15min / 30 pesos) or multicab (one-way / 20min / 8 pesos). Nearby facilities to ICM, CPM and IBT are Tagbilaran City Hall (approx. 750m), Bohol Medical Care Institute (approx. 800m) and Holy Name University (approx. 800m). From these facilities walking is possible, but there is no shade and crossing the streets is difficult. This is planned to be the future city center and hopes are that the city's growth will be directed towards this direction.

BELOW | Interior of IBT Photo by Fabio Latino Garigliano
RIGHT | Walk from IBT to CPM Photo by Charlotte Nyholm



TRAFFIC AND PUBLIC SPACES

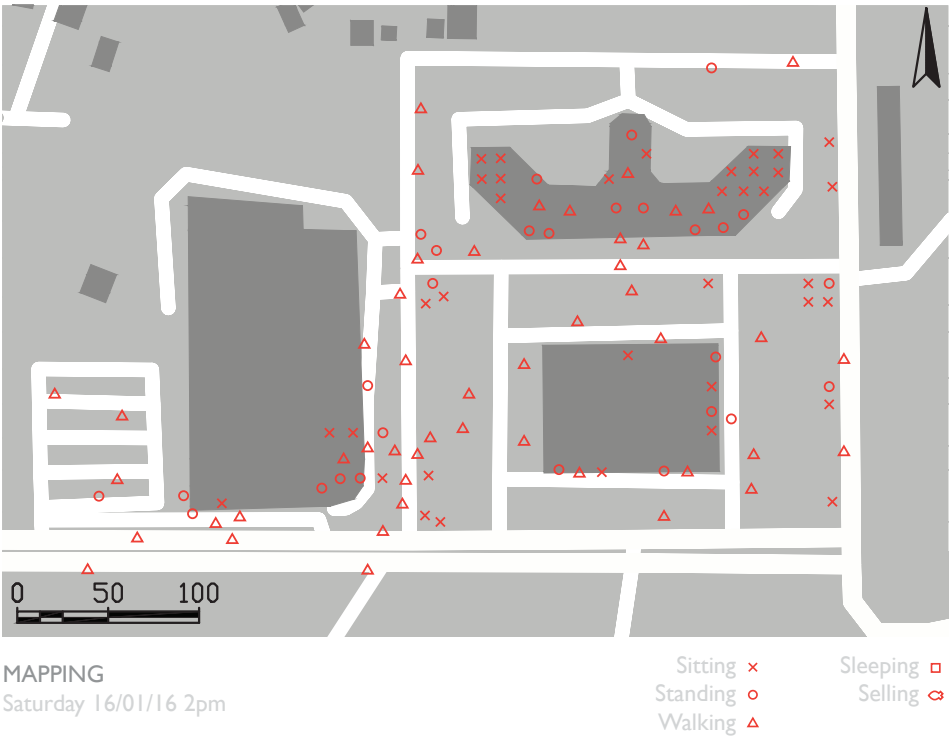
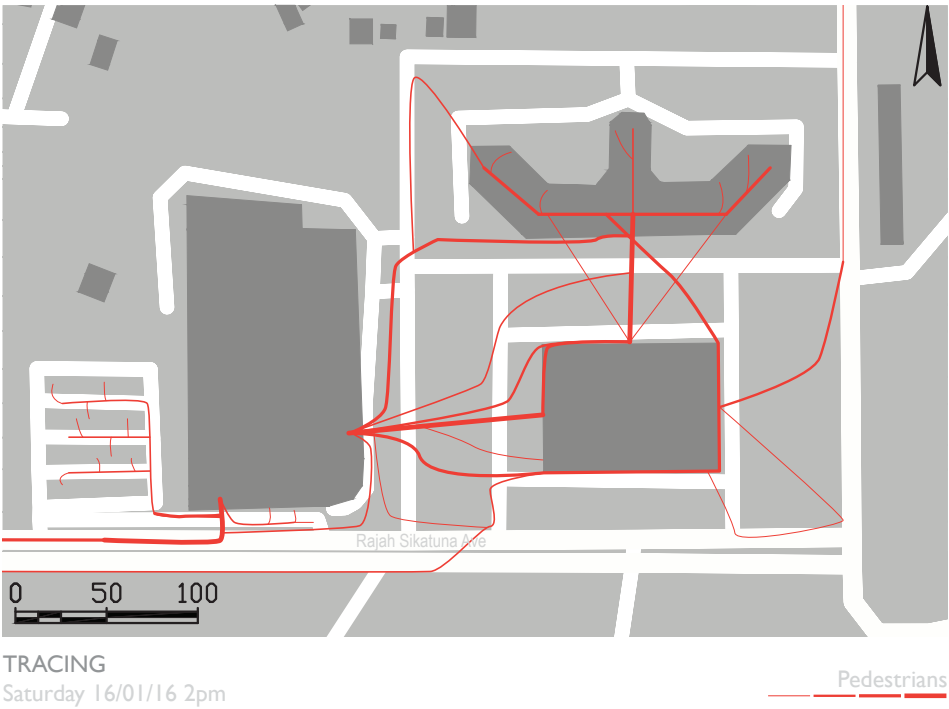
Since the site is quite far outside of the city center and most visitors are arriving by vehicle, the purpose of the wasted space between buildings is to assure smooth traffic and good parking possibilities. However, the way the area is designed pays little thought to the pedestrians traversing from one building to the other or pedestrians arriving from nearby facilities. The scale of the area surrounding the facilities and the ICM (looked at from the outside) are huge and vast. Compared with the rest of Tagbilaran, structures this scale seem alien, only the pier has at some extend the same scale and vastness, but the pier's scale can partly be explained by its primarily industrial use, here no logic or reason is found to explain why the scale is so detached from human needs. There are very few trees or shadows overall, the sidewalks follow impractical routes and there are no assigned street crossings or traffic lights.

As shown in the “tracing” diagrams, which showcase how visitors are moving on the site, a thicker line implies a more common route. ”Mapping” diagrams show where visitors are sitting, walking or standing. These analyses show how visitors are using the space and where the popular routes and places for activities are.

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After the rain these open spaces are full with mud and water puddles, making it very difficult to get across. All these big open spaces feel awkward to cross, it is a no-man's-land that lacks identity and borders to divide traffic and people. There is also nothing to see or experience in this no-man's-land which makes the walking experience quite boring.

The used public spaces are where protection against the weather can be found. Under the few trees found there men sit tightly packed together on their motorbikes, talking, watching others and joking. Along the edges of the CPM and ICM people are watching other pass by while they talk or wait. Some of the empty buses and vans are also used as places to take shelter from the sun, these are popular places for couples. Two entrances to the mall are very popular, the main entrance facing the market and the side entrance facing the road. These two are protected from the sun, there is a constant flow of people and they are a bit higher up which gives a good view on who is coming and going. A natural meeting place. The IBT also works at some level as a public space there are a lot of shops and buses but also a lot of sitting and protection from the heat which makes it a pleasant place to be.

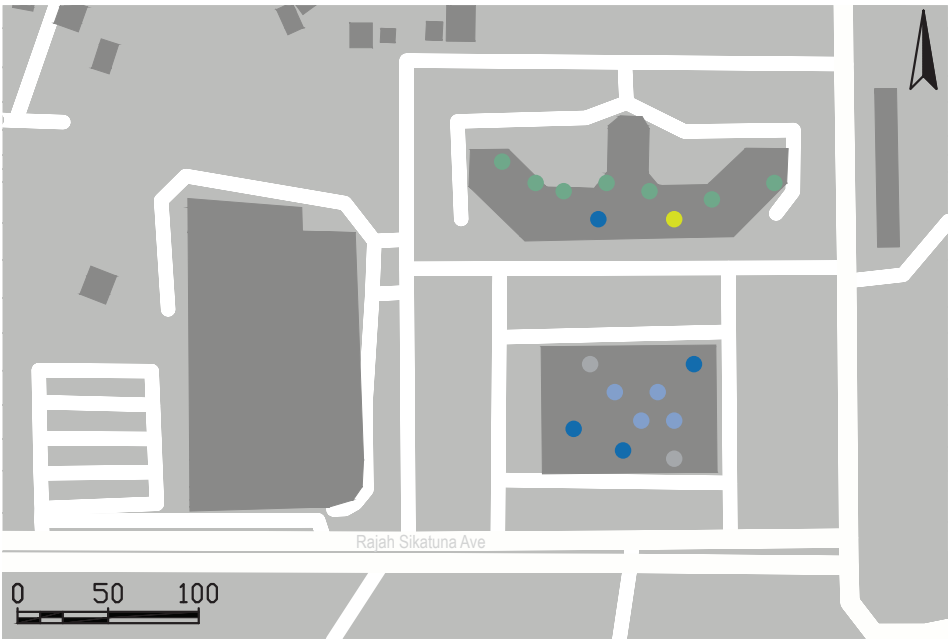


ATMOSPHERE AND DETAILS

From an anesthetic point of view the IBT is the most interesting building and indoor space. It has a clear main entrance and an airy interior full of small scale shops and activities. The design makes IBT considerably cooler than the surrounding outdoor temperatures and it is well ventilated, but apparently there are very wet floors and muddy entrances after heavy rain due to poor draining. IBT has 91 small shops and 359 seating places which may explain the popularity and the amount of noise indoors. However, it is a bearable level of noise and a conversation can be maintained easily. The market is more cramped and one almost feels like intruding when entering. Here are 281 shops so there is much to see and experience but too narrow paths and bad ventilation makes it an uninviting place for costumers. The ICM and CPM have only official shops and stands whereas the IBT is the only place where stands and official shops meet. The outdoors shops have no official stands which is uncommon in Tagbilaran streets and shopping area.

Safety from crime and violence is not an issue, one might not want to be alone outside of the mall after dark, but during the day there are no places or corners where one feels unsafe. Traffic is the main issue to worry about. Additionally to the lack of protection against weather, traffic pollution and dust are also reasons why being outdoors is unpleasant. There is much traffic noise but it is not too disturbing, beggars approach visitors when waiting for a multicab to be full or tricycle drivers calling for passengers is much more attention grabbing.

As shown in the “Counting” diagrams we can see how many people are moving in or out, sitting or how many shops are there. These numbers can make places easier to compare and understand the scale of the activities. The “Traces” diagrams show small human signs, like markings on the walls or unofficial paths. These traces show where people have taken hold of the city and where they feel at home.



TRACES
Saturday 16/01/16 2pm

- Religious Sign ●
- Fish Box ●
- Graffiti ●
- Informal Business ●
- Job Advertisement ●



COUNTING
Saturday 15/01/16 2pm

- Shops ●
- Vehicles ●
- People Entering ●
- Standing ●
- Sitting ●

SURROUNDING URBAN CONTEXT

The surroundings are mostly unbuilt since there are only some homes, small industrial or office buildings. The city planners want Tagbilaran to expand towards this direction by building big and important structures around this area they hope to attract more companies and services and slowly increase the land value. This is supposed to become the new city center of Tagbilaran.

CONCLUSION

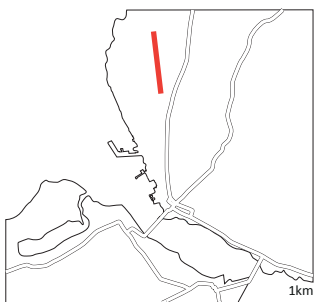
The biggest problems with the site are connected with its huge scale, which seems more suitable for an industrial site than a public one. Amongst the issues we can also find lack of thought for pedestrian usage, marginal shelter from weather, no clear path between buildings or street crossings, nothing to do, see or experience from being outdoors, no seating or street vendors. It is quite far outside the city centre and after dark only the mall is used, which closes at 9pm. Traffic is important in this site since it is far from the rest of the city so therefore should be a priority to improve the pedestrian environment in between buildings without having to make big sacrifices in regards to traffic flow.

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RIGHT | CPM Interior, low density corridor
Photo by Fabio Latino Garigliano





AIRPORT AREA

Kiira Piironen

The Tagbilaran airport is located on the North part of the city, between the Booy and Muslim Village districts. The North-South oriented runway separates the two housing districts from each other. Carlos Perez Garcia (CPG) Avenue as well as Lamdagan Street follow the Airport Road and connect the airport to the center of the city. The distance from the Airport to the city center (Plaza Rizal Park) is approximately 2 km, or 10 min., by tricycle. CPG Avenue continues as Tagbilaran North Road connects the city to the west and north parts of Bohol Island.

There are only a few international flights arriving to Tagbilaran with approximately ten daily regular flights from Manila and Cebu. The arriving and departing flights cause major circulation of people and traffic flow in the airport area. The airport passenger and airplane capacity is adaptable for only one flight at a time. A bigger international airport is going to be built in Panglao Island in the next few years and the current plan is to develop this airport area as an IT-district. Nevertheless, the area is quite large and closely connected to housing areas, effecting a mixed-use development besides the IT-district would bring the area new possibilities.

BELOW | Airport, interior drop off area Photo by Kiira Piironen



RIGHT | Control tower seen from the side parking area
Photo by Antuané Nieto-Linares



TRAFFIC AND PUBLIC SPACES

In general, the public airport area is poorly designed for pedestrians, and it is even worse for vehicles and traffic flow. The hot climate and insufficient shaded areas also cause people to avoid walking around the area. There are narrow sidewalks on both sides of the Airport Road but the potential for accidents is quite high as there is a lot of traffic during a plane landing. Also the transportation waiting area might require fences or signs to protect the pedestrians during intense traffic. The directions for walking are mainly restricted to the short section of the Airport Road and the surrounding neighborhood. The narrow neighborhood roads are mainly unpaved spaces without lanes or separation between pedestrian and vehicle areas.

The outside waiting areas are lacking possibilities for sitting and protection from the sun except for the narrow shaded sidewalk as people are accepted to take a vehicle from the parking area right in front of the airport building. As passengers arrive to the airport they mainly go straight inside the airport building and when they arrive there are taxis waiting which results in no need for staying longer. The short Airport Road leading towards the city center offers some small food shops but the areas for eating and hanging around are also poor since there is only a narrow sidewalk and a lot of traffic. The reason for the lack of waiting areas and pedestrian possibilities might be that the area functions mainly as a pass-through space and is not meant for longtime stays except for the taxi and tricycle drivers waiting for passengers.

ATMOSPHERE AND DETAILS

Traffic flow has the biggest impact on the atmosphere at the airport. The traffic circulation is causing a lot of disturbing noise and fumes that make the experience hectic and relatively unpleasant both for waiting passengers and pedestrians. Separating the parking and passenger waiting area would be one option to change the atmosphere. The airport area is also quite small and fenced with walls preventing further visibility outside the Airport road. Possibilities for communicating are average except for the times of plane landing or taking off.

The visual image of the airport is simple and unchanging compared to the surrounding housing areas. Small implementations such as vegetation could improve the aesthetic qualities and bring natural protection from the sun and heat. Currently the stone wall and tourist advertisements are covering most of the visible greenery.





MAPPING
Friday 15/01/16 2pm

- Sitting x
- Standing o
- Walking Δ
- Sleeping □
- Selling ◇



TRACES
Saturday 16/01/16 9am

- Graffiti ●
- Informal Business ●
- Job Advertisement ●
- Tricycle ●
- Rooster Fight ●
- Room Advertisement ●
- Touristic Activity ●

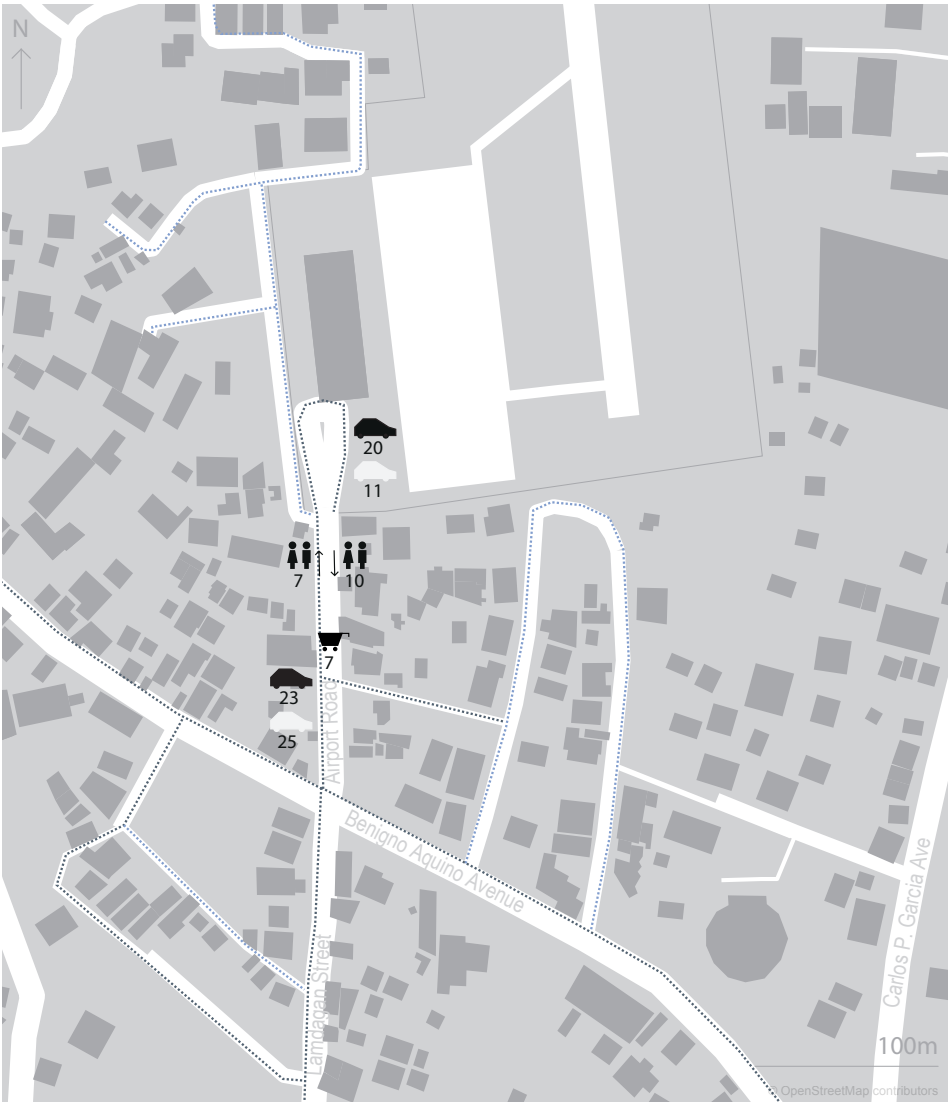
SURROUNDING URBAN CONTEXT

The surrounding areas by the airport are mostly housing districts. The structure of the airport area differs from the dense and small scale surrounding neighborhoods. From the airport onwards, to the north, the districts have features reminiscent of the countryside such as abundance of animals and bigger gardens. Most of the houses are one or two storey family houses but there are also small informal communities. There are three churches, two hospitals and a catholic school close to the airport. The surrounding districts also have their own schools. There is one restaurant at the entrance of the airport and small kiosks along the Airport Road but no other tourist services. This relatively large area, including the housing areas, is affected daily by the disturbing noise from the planes which might make it unpleasant area to live there permanently.

CONCLUSION

Some of the biggest issues found were the circulation of traffic and people. These cause uneasiness, danger and exposure to notable amount of fumes and noise, as well as, the lack of pleasant spaces for waiting. Sitting possibilities, space for travel bags, small scale services such as signs and commercial services could improve the user experience. During the evening the lack of streetlights most likely increased the sense of danger in the area as well as elsewhere in the city. There are also possibilities to improve the functionality and organization of specific areas with better signage, different materials and various means of defining borders. Also a new challenge will be a sustainable and comprehensive area development and the connections with the surrounding areas after the new airport has been built in Panglao Island.

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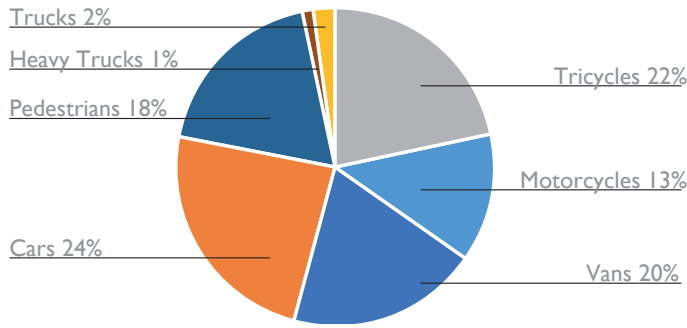


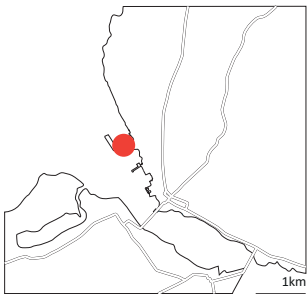
AIRPORT AREA

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SITE ANALYSES

COUNTING
Thursday 21/01/16 9:35am





CITY PORT

Antuané Nieto-Linares

The port is located 10 minutes from Tagbilaran’s main plaza by tricycle. The access to it is problematic due to the narrowness at the main intersection linking the port to Tagbilaran city. Location of the port relative to the rest of the city, however, is good since it easily connects to other facilities and towns in Bohol Island. Furthermore, the location of the port faces the most direct connection to other main cities like Cebu and Dumaguete. Some informal settlements are located adjacent to the port. These settlements offer a great view of the Tagbilaran Strait as they lay right on the shore.

The main intersection that connects the port to the city is problematic due to the heavier vehicular traffic that transits through. Residents of Tagbilaran prefer to move by vehicle instead of walking which creates the need for better traffic flow. The intersection lacks any kind of traffic signs or lights, there’s only one traffic enforcer standing on one of the corners to supervise traffic flow as shown in the picture.

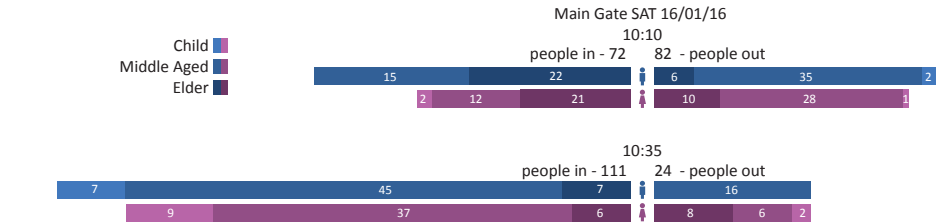
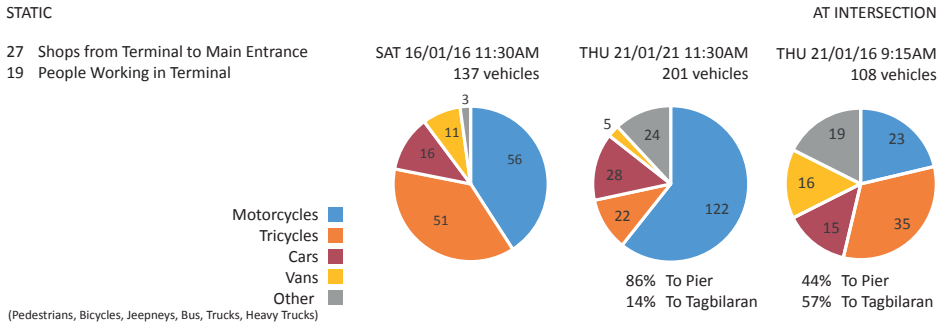
The walk from the main intersection to the terminal building lacks any protection from wind, rain, sun or heat. This issue is probably one of the most problematic. In addition to this, there are no possibilities for sitting during the 10 minute walk towards the terminal and there’s a sidewalk in only one side of the road. The control gate by the restaurant is located close to the beginning of the pier and it marks the point on which pedestrians are only allowed to walk on one side of the road. Due to the lack of protection from external agents, such as dust and noise, the walk is quite unpleasant and deteriorates the overall walking experience. The road is paved by asphalt and there are no shaded spaces to be seen until the terminal. A “human scale”, per se, is quite absent as the port scale is too big for its users.

RIGHT | Exterior sitting and waiting area of the Port Terminal
Photo by Antuané Nieto-Linares



THE PORT

The overall industrial scale of the port is good. Size and location of port meets the demand of the amount of goods delivered by the cargo ships. During the day the port is somewhat lively with people carrying out their businesses and travelers boarding and arriving. Nevertheless, there’s not an overlap of functions at the pier so at night there are very few people who transit the space purposely.

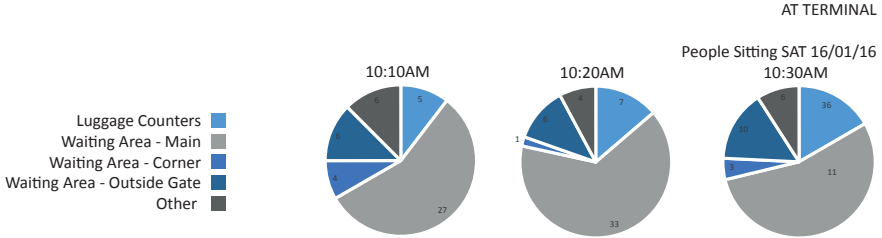
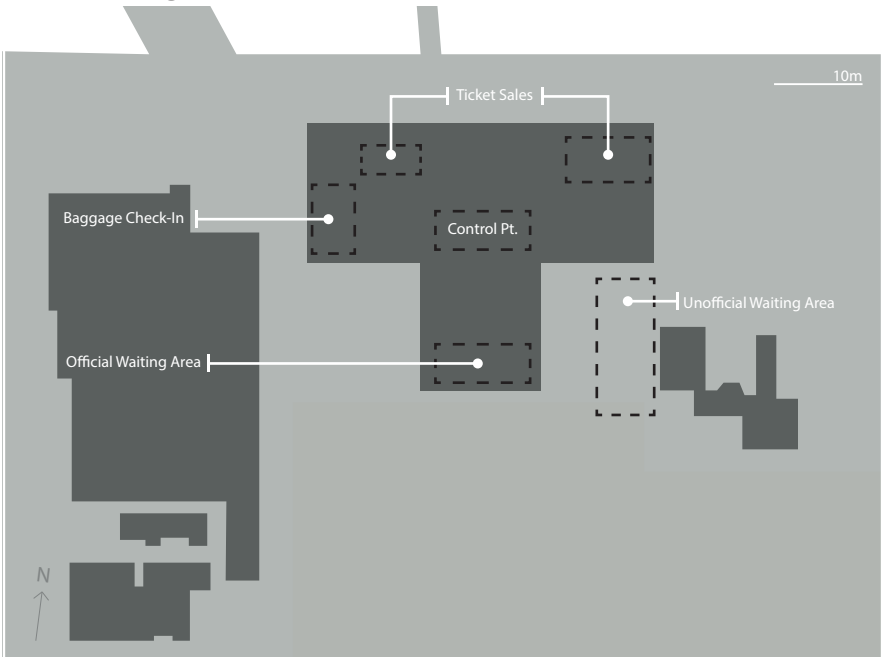


THE TERMINAL

Over 50% of the seating space at the terminal is located in the main waiting area, which is not optimal. The seating spaces should be distributed more or less evenly in the premises to avoid unnecessary agglomeration of people. In terms of user groups, mostly middle aged males were seen at the terminal while conducting the onsite studies.

Noise level while approaching the terminal is low due to the lack of congestion. However, noise level at the intersection is quite high. Activities at the terminal itself also are carried out very informally in open spaces; therefore, the noise is not aggravated by enclosed spaces that may produce eco.

The actual terminal is small and would be beneficial to enlarge it in order to address the people’s mobility. Furthermore, the signage at the terminal building is poorly designed and improvised which makes it unclear for many who are boarding.





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CONCLUSION

The architectural quality of the terminal and pier is austere and primarily functional. Very little demonstration of non-utilitarian infrastructure is displayed. As a result there are very little possibilities for play and unwinding. Human mobility in and out the port is inherently poor due to the lack of human scale. No architectural interventions that address human scale mobility are found at the port.

The influx of motorized traffic is fair, with most of the traffic being caused by motorcycles and tricycles (54-78%). Moreover, the terminal building itself seems to be too small for the demand posed by its users with 85-100% of available seats taken at all times regardless of immediacy of departure. Motorized mobility in and out of the pier is relatively good; however the main intersection adjacent to it is quite problematic due to combined poor traffic flow and high volume of vehicles.

-	+	-	-	-	-	-	-	-	-	-	-
++ well addressed		+ addressed		- not addressed		-- issues to be addressed					

RIGHT | Main Intersection leading to pier terminal
Photo by Antuané Nieto-Linares



INFORMAL SETTLEMENTS

Hannele Cederström

The entrance to the informal settlement is located along the street. A narrow alley between walls leads downhill, pass a cluttered basketball court, to a group of buildings. Finally, alleys turn into bridges over the sea. The area is separated from the city much like an island. In the area there are only people who live there, since there is no passing through the area while all the alleys and bridges are ending at the sea.

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People living there are mainly fishermen, students living in boarding houses, and people working in hospitals and malls. Morning and lunch time are active in the neighborhood since people are getting ready for school, work, or eating together. Most of the morning activities happen inside the houses, except when people walk from one place to another. During the daytime most of the men are either sleeping or working, and there are mainly women at home. Women mainly take care of children, do household chores and work in small shops. There are animals in the area as well: dogs, cats, roosters, chickens and pigs.

BELOW | Informal settlements lookout to the sea Photo by Hannele Cederström



RIGHT | Informal settlements, internal bridge
Photo by Hannele Cederström



PUBLIC-PRIVATE RELATION

People living in the area are friendly and welcoming, especially to foreigners. For locals it does not feel that comfortable to enter the area. The borders between public and private spaces in the area are undefined. Inside the houses residents can easily observe everything happening on the alleys, and it is easy to see inside the houses as well. In some cases, the neighbors gather in the alleys to watch television, since there is not much space inside. Most neighbors know each other and there are some common activities such as card playing and informal lottery. There are not many public places to gather in the neighborhood, meeting places happen in the alleys and small courtyards. Most of the exterior areas do not have any places to sit and people gather inside or next to houses. Only the outermost houses of the area have an ocean view.

ATMOSPHERE AND DETAILS

The exterior of the houses is carefully decorated with details, framed paintings, plants, bamboos and flower pots made from recycled bottles are used differently that elsewhere in the city. The way of individual expression and caring of the surroundings creates a sense of ownership from the residents, even if the legal ownership is missing. Other traces in the area are signs of shops, stickers about the count of houses, and election banners and advertisements on doors, possibly used as free building material. There is a laundry rope for drying clothes outside of most of the houses.

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BELOW | Informal settlements lookout to the sea Photo by Hannele Cederström



TRACING
Friday 15/01/16 8am



MAPPING
Friday 15/01/16 8am

- Sitting x
- Standing o
- Walking Δ
- Sleeping □
- Selling ○

TRACES AND COUNTING

Atmosphere in the area is quite pleasant. There is some resemblance with European medieval cities, since the urban structure is organic and unplanned and houses with different heights face the narrow alleys. Some houses are more permanent than others, made with concrete and painted with colors and some are lighter structured with bamboo, timber and corrugated metal sheets. Building heights vary from one to three storeys. Houses on water are supported by pillars, protected from the changing water level. Human scale, human oriented design, and lack of traffic make the area comfortable compared to the hectic cityscape around it. Shades from the plants and eaves, together with the seaside location create a more temperate microclimate. Some mangrove trees and dense building style create some protection from typhoons. Smell, garbage and dirty water are discomforting factors in the area.

SURROUNDING URBAN CONTEXT

Outside the informal settlements C. Gallares Street is busy with traffic. Because of the traffic people mostly walk or ride tricycles. Remolador Street is more calm and filled with small restaurants. Especially during the morning the street is full of sailor students hanging out standing on the side of the street or sitting and eating in carinderias. Compared to the informal settlement it is hard to enter these blocks from the street. The small alleys are dark, narrow and gloomy, and there is no vegetation.

CONCLUSION

The informal settlements have problems such as waste and sanitation, segregation, issues with safety and natural hazards, lack of ownership and funds. Despite of all the mentioned problems plenty of valuable qualities can be found. The seaside location offers livelihood for fisherman families and a strong sense of community and close relations to neighbors create amazingly warm and friendly atmosphere. The human scale and creative use of details and space build an interesting and comfortable living environment.



TRACES
Friday 15/01/16 1pm

Rooster Fight	Informal Business	Graffiti
Recycling	Social Activity	Election Poster
	Fish Box	Religious Sign

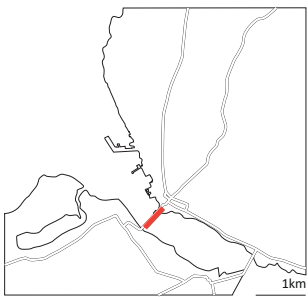


COUNTING
Thursday 14/01/16 10:30am

Marble	Dirt	Plants
Male/Female	Concrete	Wood
Entering/Exiting	Stone	Bamboo

BRIDGE TO PANGLAO AND FISH MARKET

Théophile Paquet



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The Tagbilaran Bridge, or North Bridge, has various types of activities at different times of the day. On the bridge, activity starts from 4am, when the fishers come back from the sea. The fish market is located in the middle of the bridge, on an artificial bank. For a few hours, sellers and buyers hustle around the market among hundreds of people that make use of this space every day.

This specific business model leads to different activities. At rush hour, many people walk around, going from a shop to the other. This activity also serves to spectators where many people just seat on the handrail of the bridge to glance, which serves as a very long bench. At this very early moment of the day, people seem to enjoy being here. They meet other people; do business, when the sun is still bearable.

In the late morning, the situation is different since the activity is quite slow. Few people are still making business, some are cleaning, resting, or eating lunch when the local bakery's trolley stop by. In fact, at this time of the day, most of the fish has been sold but a very strong smell of rotting fish remains in the area. The intense sun makes the place very uncomfortable for visitors.

The fish market has a very important role, as it is a social gathering for the habitants of the city. But it misses equipment such as tables or benches, where people could spend some time. There is a big need for a cooling system and efficient shade.

RIGHT | Fish market Photo by Hannele Cederström



SITE ANALYSES 93 BRIDGE TO PANGLAO AND FISH MARKET

INFORMAL SETTLEMENTS

At the foot of the bridge there is a small community of informal settlers, who built their houses on water, around old heritage mansions. By 6am people wake up and have a quick breakfast by their door. Not many people are out at this time but a few children are off to school. There is a very peaceful and quiet atmosphere in this area reminiscent of a village.

By 11am the activity is more intense since events are organized on the plaza and next to the small church, such as rooster fights. Neighbors and outsiders gather for these events. Small shops sell food and kids play around. There is no official place to seat, so many people stand up, or seat on chairs they brought from home. The closeness of the buildings and the trees create sufficient shade for the streets to be enjoyable.

BELOW |View of a street of the informal settlements by the pier.
Photo by Théophile Paquet



MAPPING
Thursday 14/01/16 6am



MAPPING
Thursday 14/01/16 11am

- Sitting x
- Standing o
- Walking Δ
- Sleeping □
- Selling ◇

TRACING

TAGBILARAN BRIDGE AND FISH MARKET

Very early in the morning, a lot of people gather by the fish market, mainly from Tagbilaran’s side of the bridge. People walk primarily on one side of the bridge which is the shortest way to the fish market. Random pedestrian crossing happens by the entrance of the market and despite of the heavy traffic there is no dedicated place for pedestrians to cross the bridge and enter. Moreover, the sidewalks are quite narrow, which brings the pedestrians closer to cars and motorcycles.

Walking on the bridge is challenging mainly due to the absence of shade which makes distances seems longer. But the view of the surroundings makes the crossing worth it. Walking in the fish market is complicated as many vehicles and people transit by. Moreover, in regards to the surroundings and site, the ground is very uneven and dirty in most places.

During the day the activity is quite low in the fish market. But people still use the bridge to cross the strait to go to Dauis city. Inhabitants go from one house or shop to the other by crossing the road from any given point.

The bridge and fish market area could easily be enhanced to become a composite zone for local businesses, touristic activities and urban promenades. A reduction of the traffic on the bridge and an implementation of a shade system could easily solve crucial issues.

INFORMAL SETTLEMENTS

In the informal settlement area walking is easy due to very little traffic and presence of shade. By 6am a very few people are in the streets mostly going to school, work, or having a morning walk. During the day, activity is more intense. People gather, for instance, for beauty pageants, rooster fights, or church services. This leads to a pedestrian gathering around a focal point or activity.

The traffic around the informal settlements down the bridge is very scarce. There is no feeling of danger as one can easily walk on the road. There is no major intervention needed in the informal settlements concerning pedestrian traffic. This area is quite similar to a dutch woonerf where people and cars mingle quite easily without any major disturbance.



TRACING
Thursday 14/01/16 6am



TRACING
Thursday 14/01/16 11am

Pedestrians

TRACES & COUNTING

TAGBILARAN BRIDGE AND FISH MARKET

The Tagbilaran Bridge has a very important symbolic role as it is the link between Bohol Island and Panglao Is-land, and as such a link between Tagbilaran and Dauis. It is situated in the historic axis of the colonial city, formed by the Provincial Capitol, the Plaza and St Joseph the Worker Cathedral. Moreover its symbolic meaning is key in the actual traffic plan of the city which makes it one of the busiest roads in the city. It is also a business point, as the fish market gathers hundreds of people every day before dawn.

Despite its importance in Tagbilaran the bridge is not yet an important space for expression. There is not much surface for people to hang posters, graffiti, or leave any sort of major traces around the area. Some can be spotted around the entrance of the fish market; however, the massive handrail of the bridge is used as a very long bench and as a surface to dry fish. In the eventuality of a development of the area, the bridge and the market could handle more spaces for self expression. Its position in the historical axis next to the center of Tagbilaran makes it a good candidate for public events.

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INFORMAL SETTLEMENTS

The informal settlements are a very quiet place in the city. But sometimes they can become quite noisy and cheerful with the events that take place there, such as a rooster fights or beauty pageants. Public space there is used as a “celebration space” where the local community meets.

Very small shops function as convenience stores which fulfills the day to day basic needs. The church is also a place where the community gathers regularly. The vehicle traffic is very low. One can walk on the road without any fear. This area doesn’t need heavy construction. Simple furniture or facilities could enhance the possibility for the community to gather.



++ well addressed + addressed - not addressed -- issues to be addressed

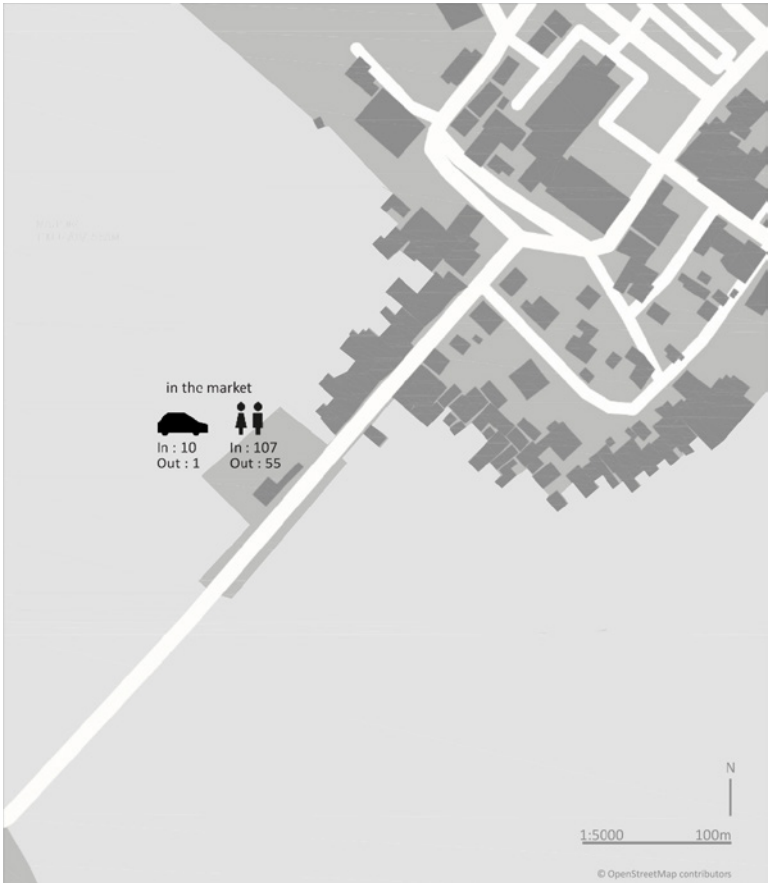


TRACES
Thursday 14/01/16 6am

- Informal Business
- Advertisement
- Political Poster
- Graffiti
- Rooster Fight

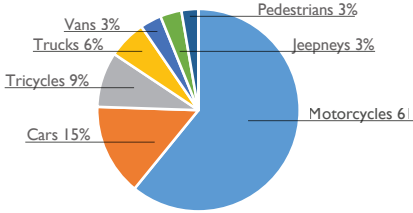
BRIDGE TO PANGLAO AND FISH MARKET

99

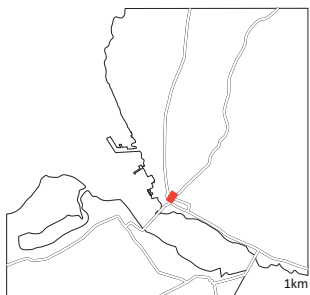


COUNTING
Thursday 21/01/16 10am

- People Entering / Exiting
- Shops
- Public Vehicles
- Private Vehicles



SITE ANALYSES



CHURCH AND PLAZA

Fabio Latino, Janne Salo

The plaza, or by official name “Rizal Park”, is the only designated public plaza in Tagbilaran. It is located next to the old Capital Hall, City Museum and Cathedral. The functions of the Capital Hall have been relocated away from the city centre but due to the close-by location of the Cathedral, this makes the plaza somewhat a popular place. Especially during Sunday mass, the activities in and around the plaza grow significantly compared to ordinary days.

The road network next to the plaza is mainly composed of one-way streets without any notable pedestrian sidewalks. This makes pedestrian access to the plaza difficult because of isolation and high traffic flows on streets next to it.

The plaza has several points of interest such as the central statue, gazebo and fountain. Also some small businesses are located within the plaza. Closest medium to large-scale commercial activities are located along Carlos Perez Garcia (CPG) North Avenue. Rather than being a traditional European style plaza surrounded by cafés and shops, the plaza can be seen as an isolated park zone in the middle of a roundabout.

BELOW | Axial view of Plaza Rizal Photo by Charlotte Nyholm
RIGHT | View from the middle of Plaza Rizal Photo by Antuané Nieto-Linares



PROTECTION AGAINST TRAFFIC & ACCIDENTS, CRIME & VIOLENCE, UNPLEASANT SENSE-EXPERIENCE

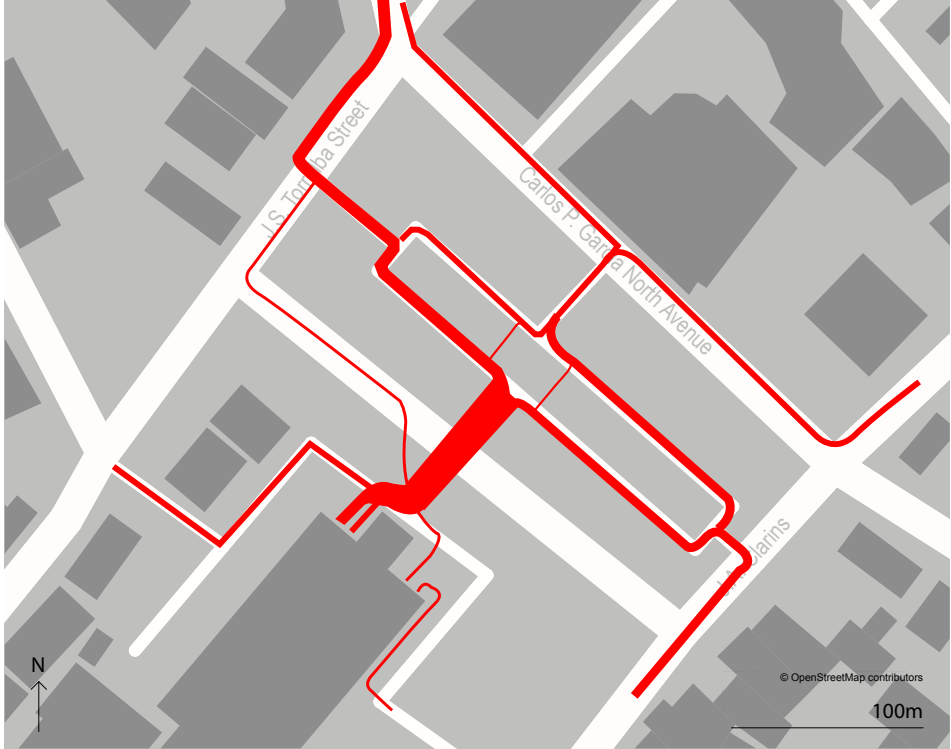
The plaza is located next to some major roads. The main avenue of the city – CPG North Avenue – passes by the plaza making it a relevant traffic node. Significant traffic flows make entrances to the plaza prone to traffic hazards. Connection from the plaza to the cathedral is complicated and dangerous due to large traffic volumes on the street section. However clear separation from the streets and fence does make the plaza an entity protected from traffic.

During the daytime, the plaza is populated by mainly young or elder visitors. During the daytime the amount of “streetwatchers” are plentiful and social presence is strong, providing a safe atmosphere. Compared to the streets the plaza is less crowded and most likely decreases the risk for pick pocketing. Due to the religiousness in the Philippines, presence of the cathedral can inhibit reckless or obscene acts.

Being an open space, the plaza offers little protection against noise, pollution, dirt and unpleasant smells. Since the fountain is not operational, the dried sewage system could be a potential source of unpleasant smells. Design reflects the climate, which is very hot and humid. Natural breeze is scarce and fuel fumes are present. In terms of tropical sun, the plaza design is not functional as it does not provide enough shade for activities to happen.

POSSIBILITIES FOR WALKING, SITTING AND STANDING

The plaza is paved with concrete slabs and as such provides a comfortable and even walking zone compared to other parts of the city. A pathway circulates around the plaza and provides connections in and out. Larger open space offers possibilities for groups to stand still as well as small merchants to set up their stalls. Several benches are installed along the pathway providing sitting places. Plant podiums offer possibilities for sitting and laying down for a nap. The gazebo in the middle of the plaza can be used for various activities, such as dance training.



TRACING

Pedestrians

MAPPING
Sunday 17/01/16 8:45am

Sitting x
Standing o
Walking Δ
Sleeping □
Selling ○



POSSIBILITIES TO SEEING, HEARING AND TALKING

The plaza allows for visibility at a distance since its design follows straight lines. Vegetation doesn't quite follow this grid apart from the trees that can be found along the sides of the central paved portion. The plaza would benefit from a new landscape and a new space arrangement to allow for the development of new activities. Benches are lined up next to each other, separated usually by one tree. The majority of the benches do not face each other. Their design and arrangement provides privacy and makes the plaza a spectacle.

Lighting at night is provided by street lights adjacent to the plaza, also by post lights from two lamps that need repairs. The plaza seems sufficiently lit in towards the centre, although some floor lighting or recessed lights could improve the environment's appearance and the overall feeling of safety. Noise level is quite high since the plaza is surrounded by traffic congested streets. The speed of the traffic flow is slow, for this reason the noise is continuous and could be improved by installing some noise barriers such as plants or hedges.



ACTIVITIES AND SERVICES AT THE PLAZA

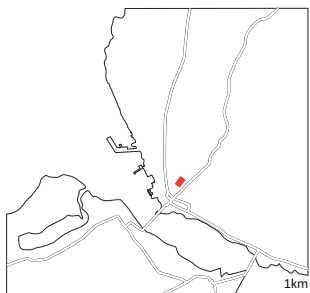
The plaza is quite formal, a predominant interest for aesthetics over function makes the place feel rigid and difficult to engage with. Playing opportunities are restricted to a chess table and there is not enough ground to play ball games. The paved portion is used by youths to do dance rehearsals, although the place is mostly used as a meeting point "to see and to be looked at". The plaza attracts a mix of demographics namely, elderly people, families with young children, teenagers and middle aged inhabitants. Informal activity is also present. Lack of shade may discourage further activity.

The plaza presents festive decoration associated with local business advertisements on each tree. The central monument had a Tagbilaran-sign – feature understood as a new way to brand the city and its tourism industry. There are no telephone booths although adding wi-fi to the plaza could add value. There are no notice boards. Waste paper baskets are absent and trash is piled up and collected in one point of the plaza, next to one of the northern exit.

CONCLUSION

The plaza is a relevant and well-located place within the city and has a huge potential for different activities. The beautification process didn't take into account local climate conditions. Furthermore, car-centric traffic design prevents connectivity to urban streetscape. As an urban public space – despite several weaknesses – the plaza can be considered as a better than average quality pedestrian environment in the Tagbilaran context. With small-scale interventions the plaza could become a popular place to be in the City.





CITY BLOCKS

Sophie Regal

MOTLEY CITY BLOCK

Characterized by low building density area close to downtown. In fact J.S. Torralba Street leads to the plaza and St Joseph cathedral within a 5 minute walk. This area is excluded from the heavy traffic but roadsides are still crowded by vehicles consisting mostly of cars and jeepneys. Overall it is a heterogeneous site composed of wooden heritage houses, western style buildings, as well as small markets and warehouses. The district possesses huge unbuilt areas and some small plots of gardens with trees directly attached to old properties. The site is well served by public services, such as the central elementary school and a community hospital. A new marketplace is installed in a strategic location under the influence of a commercial area on the West side and close to a public transportation node. The district is quite popular in regards to people usage of the public space.

DETAILING THE PUBLIC SPACES

For pedestrians, there is no proper protection against traffic. Sidewalks are not provided in the area; however, the traffic is relatively low and slow. This is in part attributed to pedestrians walking on the road. This provides more possibilities for walking because the space itself is more flexible. Nevertheless, with the cars parked on the roadside, walking becomes more dangerous and indeed decreases users' visibility. Protection against unpleasant climate is provided by a few tree shades and little businesses' awnings. This restricts the possibilities for standing or sitting while the district is rather calm and hence hinders the possibilities of hearing and talking. The market's roof is made of corrugated steel, placed under the canopy of an old tree which permits protection from the rain, and provides shade without overheating. During the day the street life provides a suitable protection against violence. In this way the district presents enough potential for enhancing the street life.

RIGHT | Typical residential city block. Photo by Sophie Regal



LOCAL ATMOSPHERE

Foreigners can feel the cultural marks of this area in spite of the lack of foreseeable cultural heritage or habits of the residents. The depreciation or abandonment of the native culture in favor of occidental influences can be noticed. Liveable edges are replaced by long blank walls, and wooden houses are completely forgotten or hidden behind corrugated steel.

Despite of this, J.S. Torralba Street accommodates food vendors and other informal businesses. They provide cheap and local products which support a circular economy. Parallel to this, the quietness of the surroundings invites the drivers to rest. In here, you can observe moving pieces of art. The colorful jeepneys and multicabs wait in the shade of old trees before rejoining the city rush.

CITY BLOCK IN TRANSITION

The urban pressure and the influence of the commercial district stimulate changes on this area. In fact the site displays a provision of land with great potential to develop Tagbilaran. Appropriate urban planning should bring value to this location once again and integrate it into the downtown area.

The city block could promote the image of Tagbilaran, highlighting the cultural heritage and the urban practices. The design should enhance the urban landscape in order to make it more liveable. In that sense it could boost the local economy and improve the working condition of the informal dwellers. This new cultural experience could attract tourism in the downtown area and improve the global economy of Tagbilaran.

This site could be subject to the process of gentrification, despite the major outcome for the city. Regardless of this, the design should take into consideration the influent land owners on F. Rocha Street and Hontanonas Street. The new proposition could formulate the city development in a sustainable and inclusive way.



TRACING
Saturday 16/01/16
10:30am
Pedestrians



MAPPING
Saturday 16/01/16
10:30am
Sitting x
Standing o
Walking Δ
Sleeping □
Selling ◇

CONCLUSION

The area presents many opportunities to improve the liveability of the space despite the lack of design. Indeed policies at the moment provide importance just to the roads. Nowadays, most pedestrians move around this area and as such it commands our attention. How to improve the dynamism of the block while keeping it pedestrian friendly and out of the heavy traffic? How could we upgrade the liveability of the City Block?

-	+	-	-	-	-	-	-	-	-	-	-
++ well addressed			+ addressed			- not addressed			-- issues to be addressed		

BELOW | Low density city blocks. Photo by Sophie Regal

110

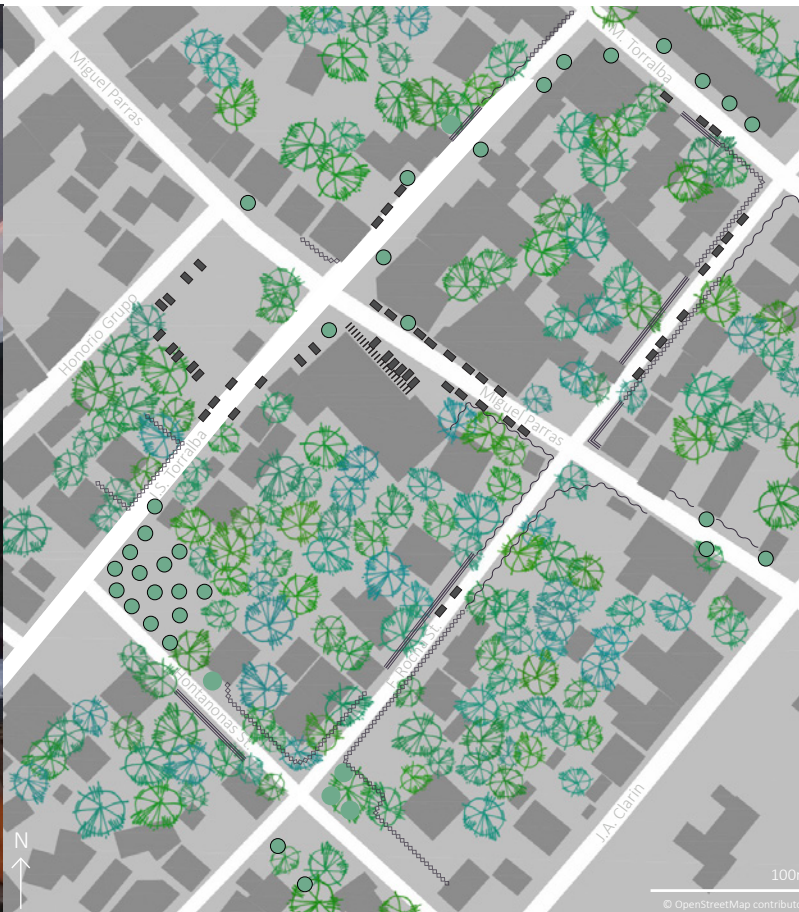


TRACES

- New Marketplace
- Jeepney Station
- School
- Hospital
- Ancestral Heritage House
- Wooden House

CITY BLOCKS

SITE ANALYSES



COUNTING / EDGES
Saturday 16/01/16 10:30am

- Informal Business
- Corrugated Steel
- Concrete Wall
- Fence
- Parking
- Cars
- Greenery

TAGBILARAN PUBLIC LIFE

Charlotte Nyholm & Taru Niskanen

The tallest building, the biggest mall or the most spectacular monument do not help if living in, working in and visiting a city is an overwhelming experience. Many fast developing cities seem to follow the same model to attract citizens and investments. Shopping malls, cars and tall buildings are considered to represent development, though they represent imported products originally developed for entirely different economical and environmental conditions. This is why the recipe rarely succeeds in making these cities attractive.

In Tagbilaran land use is not controlled and the development of the city is not planned which has resulted in lack of adequate housing, chaotic traffic conditions, inefficient or none existent sanitation and sewage systems and polluted air from congested streets that were not planned for the amount of cars they serve. No attention is paid to the qualities affecting urban life.

Imported visions for the city's future are taking Tagbilaran in the direction of so many other cities in Asia and all across the world, which are indistinguishable from one another. There is nothing unique about them and they are therefore also not able to be competitive on a global scale. This approach to urban development also leads to an urban environment, which feels foreign to its citizens, as it is not based on their way of life. Problems, such as an unpleasant environment, congestion, noise and pollution are aggravated, not alleviated.

Yet Tagbilaran still has places, where a good quality of urban life can be found. These are places that still retain a human scale, a nice breeze from the sea and some greenery to give shadow. They are also places, where common citizens have been able to build their homes and organize their neighbourhoods using common sense and the resources available. What is missing is an approach that would make the most of these existing assets, highlight them and base future development on creating a distinguishable identity for the city. This would also create attractive urban spaces enabling active urban life and generating local pride.

LEFT & BELOW | CPG Avenue in Tagbilaran & Sari-Sari store in residential block.
Photos by Lotta Nylund



PROJEC



ZONE²

DEVELOPING ECONOMIC POTENTIALS & LIVEABILITY FOR FUTURE TWIN CITIES

Antuané Nieto-Linares

Tagbilaran is the biggest city on Bohol Island which is located in Central Visayas. Languages spoken are Visayan (Cebuano), Filipino (Tagalog) and English. Tagbilaran has a population of almost 100,000 people (Census, 2010) within a land area of 32.7km² which is divided into 15 barangays (districts). Tagbilaran has grown substantially over the last half a century with an average growth rate of 3.6% per year. Dauis is located only 3km south of Tagbilaran. It has a population of almost 40,000 people (Census, 2010) with a land area of 42.9km² which is divided into 12 barangays. Unplanned development of both cities has lead to the progressive extension of a sprawling urban fabric as opposed to a more activated (and dense) urban core. Furthermore, the immediacy of Tagbilaran and Dauis to important touristic sights creates an incentive to improve regional connectivity and mobility to other sites of Bohol and Panglao islands.

According to a study done by the Philippine Statistics Authority in 2012, the Central Visayas only had a 0.1% immigration rate in the past 5 years. This data corroborates with our understanding of social life in Dauis and Tagbilaran as mainly unchanging due to its homogeneous culture. Understanding of people's views and how they identify themselves with their city can be a tool to address the issue of public space deficiency.

RIGHT | Panglao Bridge and Fish market
Photo by Antuané Nieto-Linares

LAYOUT

Critical Points of Interest | ANALYSIS I

Landuse, Mobility | MASTERPLAN II

Pier, Airport | URBANIZATION & REDEVELOPMENT III



SOCIETAL

LANGUAGE

ECONOMY

The main source of income for Boholanos derives from entrepreneurial activities. About 60% of the city's population is directly dependent on fishing (UN-Habitat, 2006). Tagbilaran is Bohol's business capital where the majority of businesses are micro, small and medium establishments. New strategies for branding are also being put in place to promote Tagbilaran as an important touristic destination. Economic inequality is the most apparent cause for segregation in the region.

TOURISM

With the new international airport being constructed on the nearby Panglao Island, Bohol will gain a higher influx of tourists, though they will be arriving directly to Panglao. Without the current national airport, Tagbilaran's main points of arrival will be by sea or land from nearby locations, significantly reducing the amount of arrivals to the city.

CULTURAL HERITAGE

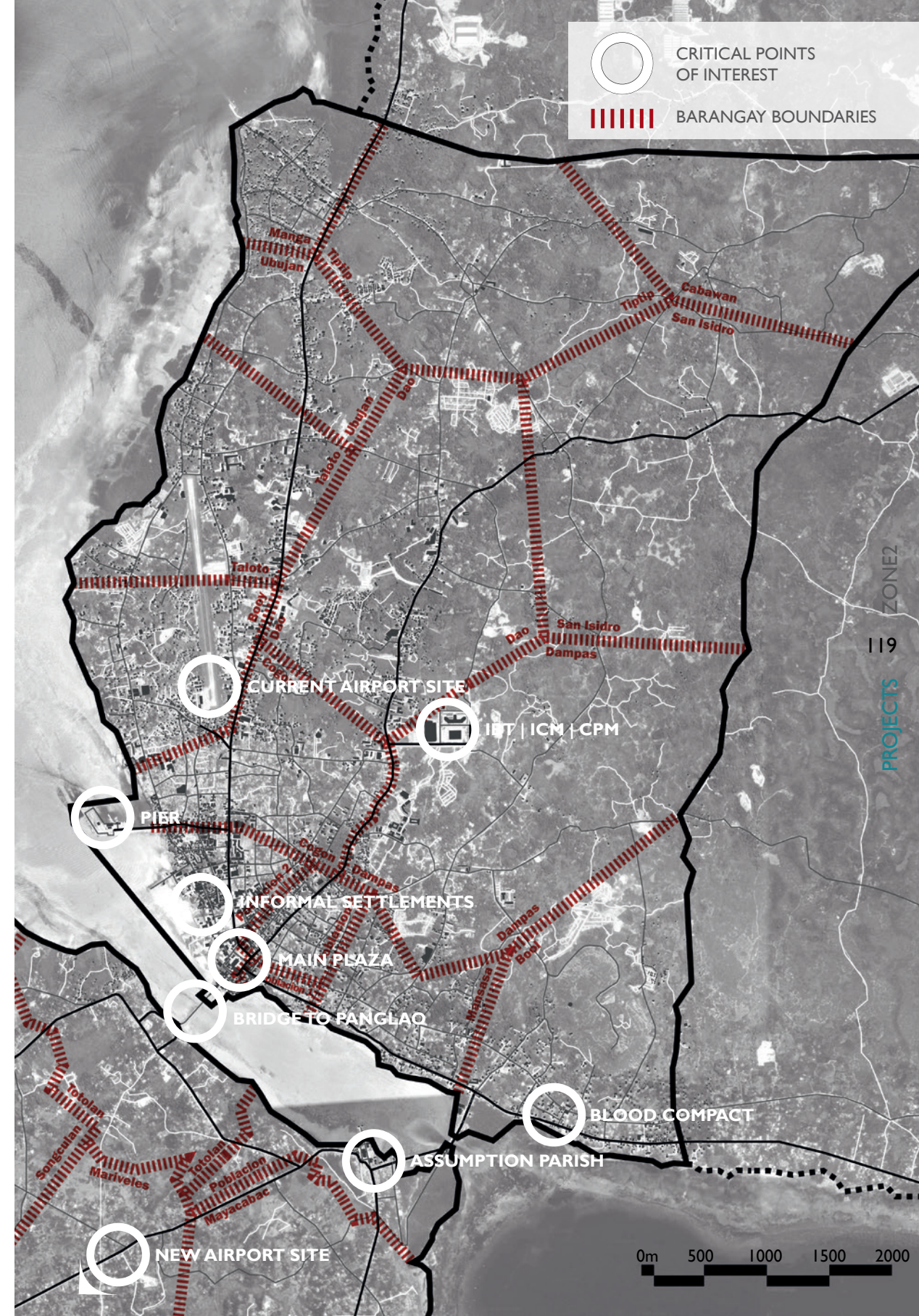
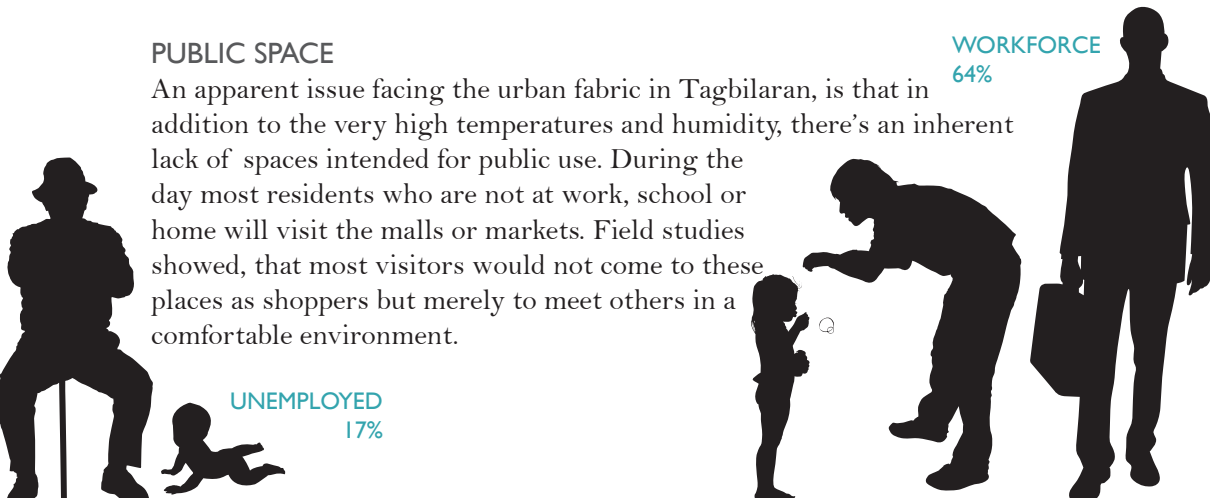
Heritage preservation is notably absent in Tagbilaran. New strategies promoting and establishing a stronger cultural identity for Boholanos would be of advantage.

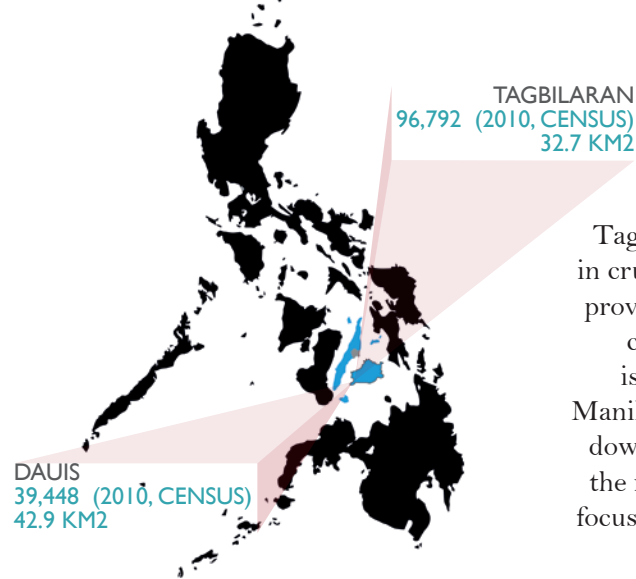
PUBLIC SPACE

An apparent issue facing the urban fabric in Tagbilaran, is that in addition to the very high temperatures and humidity, there's an inherent lack of spaces intended for public use. During the day most residents who are not at work, school or home will visit the malls or markets. Field studies showed, that most visitors would not come to these places as shoppers but merely to meet others in a comfortable environment.

WORKFORCE
64%

UNEMPLOYED
17%





I. ANALYSIS

In our studies we observed Tagbilaran’s lack of self governance in crucial matters such as national and provincial road development or major changes in land use. The planning is mostly strategized from Cebu or Manila and the new policies are passed down to the municipal authorities. At the moment, government officials are focusing on economic growth through tourism development.

URBAN | RURAL
DENSITY 85 | 16 PEOPLE PER HA.

II. MASTERPLAN - 1,254ha

120

The identity and culture of Tagbilaran can surge through public conversation despite of the lack of resources. During site visits, a lot of solidarity was observed amongst neighbors. This is important to note, because through this solidarity a bridge was being established between the “powerless” and the “powerful” who are taking decisions over the cityscape. The changes in land use proposed here aim to reduce levels of segregation, utilize existing centers in Tagbilaran, incorporate Dauis into the densification and mobility strategies, upgrade the quality of housing for the urban poor, and implement small pockets for recreational and public use.

Conversation between groups occurs in public spaces where people can engage in debates freely and discuss new possibilities for themselves and the place they live in. This shift of focus from public space to public life allows our societies to rethink certain building typologies and embrace new programmatic possibilities. The following proposal for new land use and traffic attempt to demonstrate alternatives that are more responsive to the needs expressed by the residents of Dauis and Tagbilaran. These proposals are an attempt to respond to the future situation of the city in terms of population density, mobility, infrastructure, services, education, culture, and tourism.

LANDUSE

EXISTING

The rapid and unplanned population growth experienced in the past 50 years has lead to congestion in some parts of the city and segregation in some others. Isolation of informal settlers at the shore where the land is less desirable is evidence of spatial segregation. Inundation areas are found towards the North West coast of Tagbilaran and South East coast of Dauis. Due to this and rising water levels, human settlements on the shore should be prevented.

Over 60% of the built up areas in Tagbilaran are in residential use, therefore making housing typologies and efficient land use quite important to the overall development and vision for the city. About half of the population of Tagbilaran lives within the barangays of Poblacion 1, 2, 3 and Cogon. Many fire prone areas are due to the overcrowding of houses that host an average of 5-6 people per home. Highly urbanized areas also need to implement a waste management strategy. The city’s new proposed governmental cluster located at the geographical centre of Tagbilaran has the potential to become a second centre for the city, provided that the connection from the current city center is enhanced.

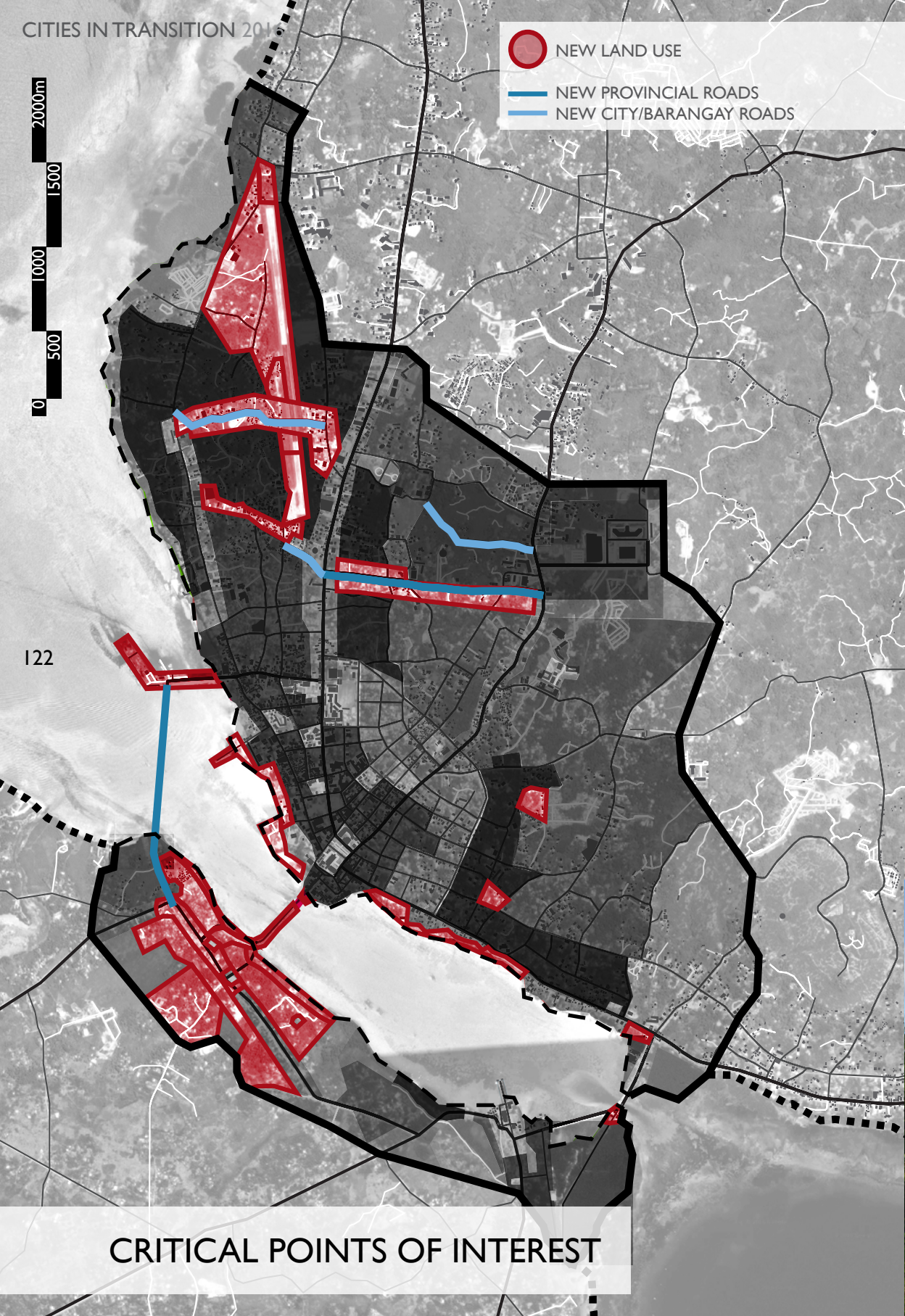
CURRENT AIMS & ISSUES

The government’s proposed land use plan aims to grow all centers in the 15 barangays to make Tagbilaran a polynuclear city. Focusing on strengthening and expanding the already established economic centers instead would be a better use of resources. The increased revenues from more activated urban cores could be use for the improvement of public institutions. A reclamation plan is also part of the city’s proposed vision, seeking to extend the shore line from the pier to the fish market given the supposed lack of available land for development. Intensive rather than extensive development could harvest and diversify economic activities. The city’s land use study shows a lack of:

- Educational institutions | 2.43ha needed
- Cemeteries (burial grounds)
- Tourism Service Centre
- Heritage Preservation Centre
- Feasible relocation site for informal settlers
- Updated equipment and infrastructure for health institutions
- Comprehensive environmental plan

2000m
1500
1000
500
0

- NEW LAND USE
- NEW PROVINCIAL ROADS
- NEW CITY/BARANGAY ROADS



CRITICAL POINTS OF INTEREST

PROPOSED

RECREATIONAL

Shores are naturally risky areas and as such not recommended for permanent living, but they can be used for public space. Inland, smaller recreational pockets will also be allocated within walking distance of most residents. Green and recreational areas can be designed to encompass their own microclimate making it more comfortable for their users.

RESIDENTIAL

The total housing requirements are at least 45.5ha. At least 27.1ha is needed for social housing or low income families (average unit size of 50m2). Redeveloping the new airport site is a feasible relocation site for informal settlers.

COMMERCIAL

Development along main roads and pier (highly commercial area) with the intention to enhance connectivity. Implementation of Tourism Service Centre by the pier.

INSTITUTIONAL

Development of different level educational institutions (2.43ha needed), service (city crisis centre, shelter for women & children, youth centre), culture, and heritage centers.

ROADS

Hierarchy of streets to adjust to new public transportation routes (jeepneys), institutional & commercial clusters.

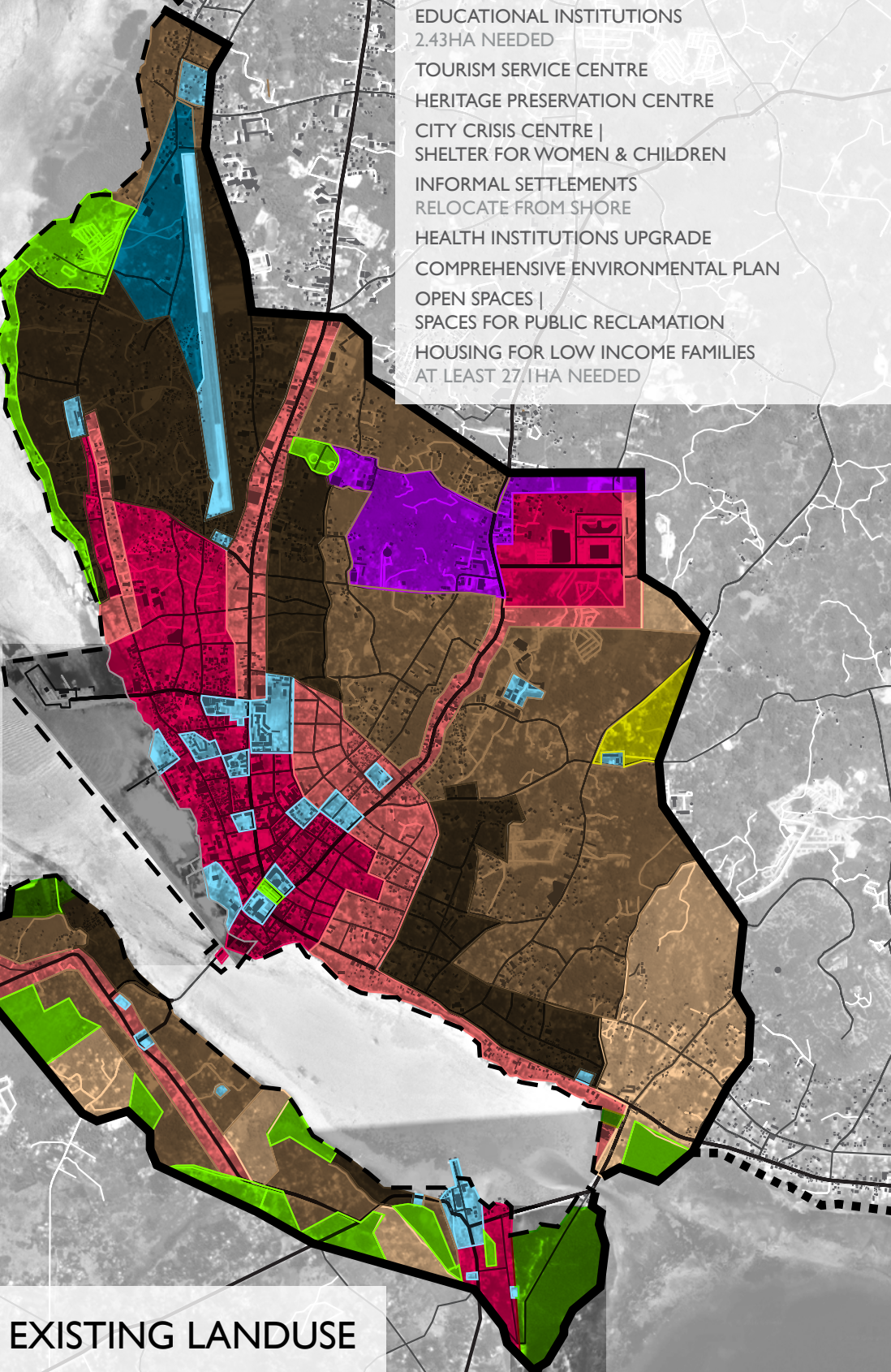
BELOW | Empty lot by current Tagbilaran Airport Photo by Antuané Nieto-Linares





- CRITICAL POINTS OF INTEREST**
- EDUCATIONAL INSTITUTIONS
2.43HA NEEDED
 - TOURISM SERVICE CENTRE
 - HERITAGE PRESERVATION CENTRE
 - CITY CRISIS CENTRE |
SHELTER FOR WOMEN & CHILDREN
 - INFORMAL SETTLEMENTS
RELOCATE FROM SHORE
 - HEALTH INSTITUTIONS UPGRADE
 - COMPREHENSIVE ENVIRONMENTAL PLAN
 - OPEN SPACES |
SPACES FOR PUBLIC RECLAMATION
 - HOUSING FOR LOW INCOME FAMILIES
AT LEAST 27.1HA NEEDED

124

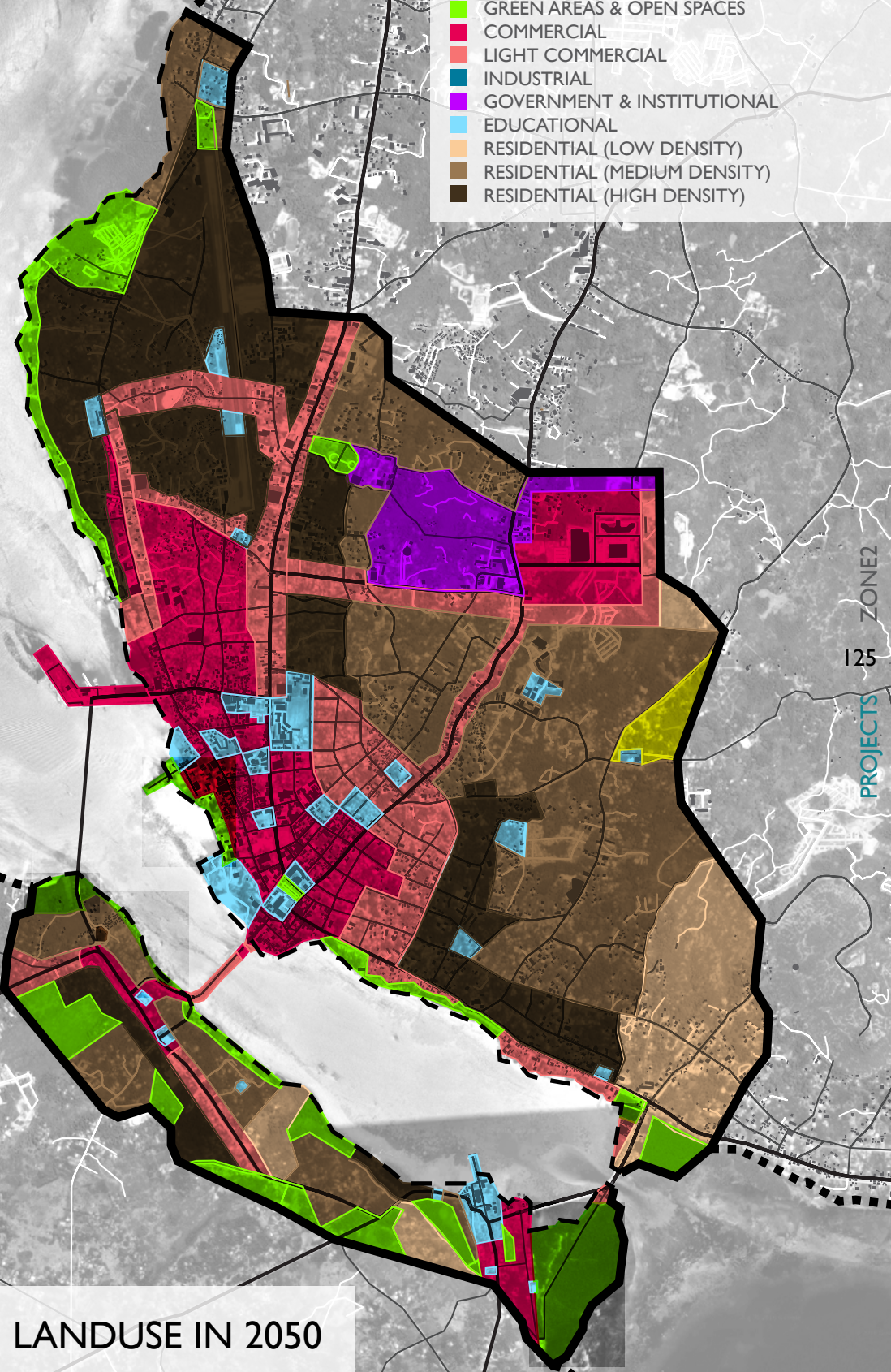


EXISTING LANDUSE



- AGRICULTURAL
- GREEN AREAS & OPEN SPACES
- COMMERCIAL
- LIGHT COMMERCIAL
- INDUSTRIAL
- GOVERNMENT & INSTITUTIONAL
- EDUCATIONAL
- RESIDENTIAL (LOW DENSITY)
- RESIDENTIAL (MEDIUM DENSITY)
- RESIDENTIAL (HIGH DENSITY)

125
PROJECTS
ZONE2



LANDUSE IN 2050

MOBILITY

EXISTING

Traffic in Tagbilaran is inherently chaotic. The city’s size, density, and economic situation results in an the use of tricycles and motorcycles as the main source of transportation. This behavior diminishes the urgency for public transportation development. Major knots are found at the intersection leading to the pier, main Plaza, and the north bridge connecting Dauis with Tagbilaran.

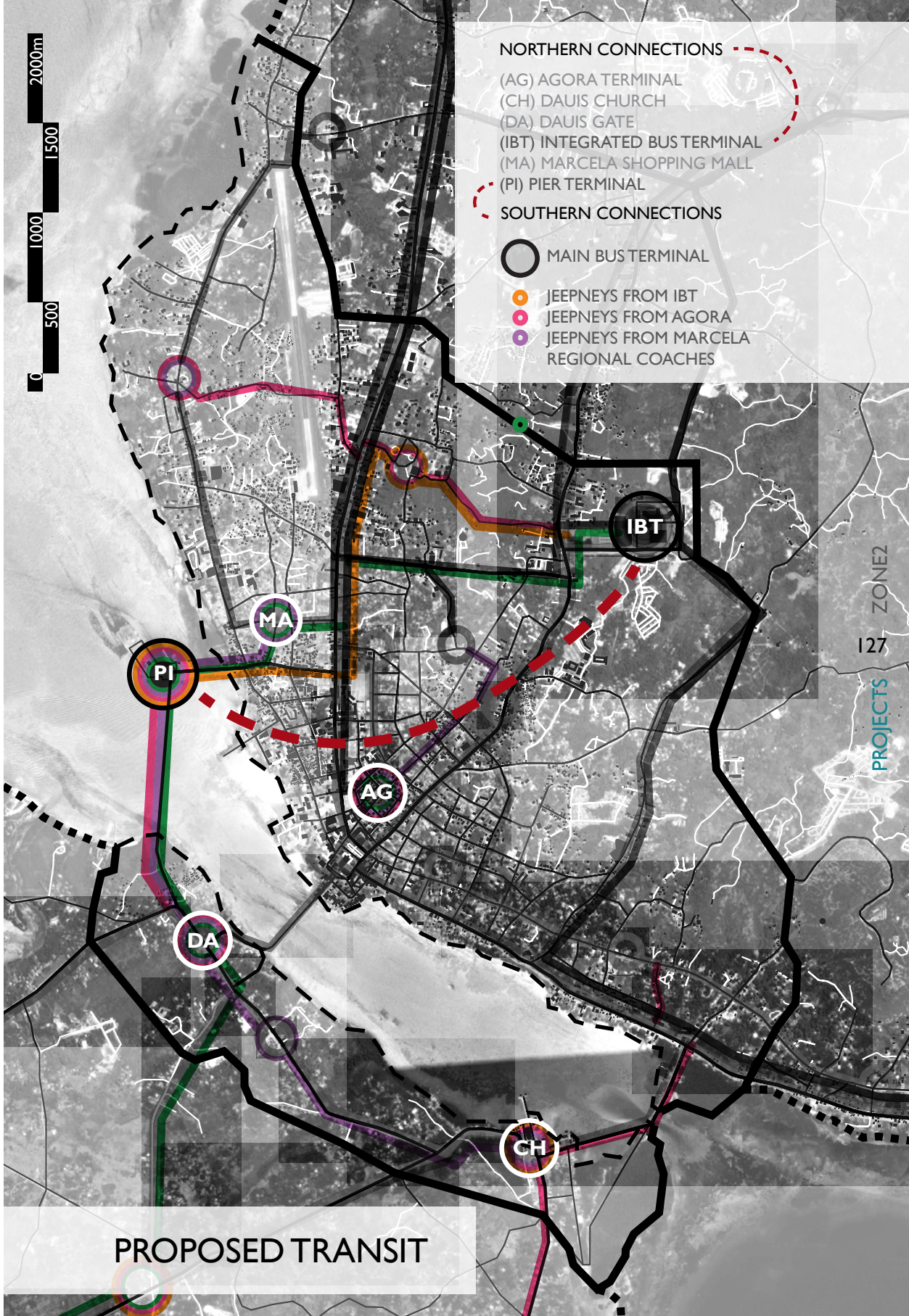
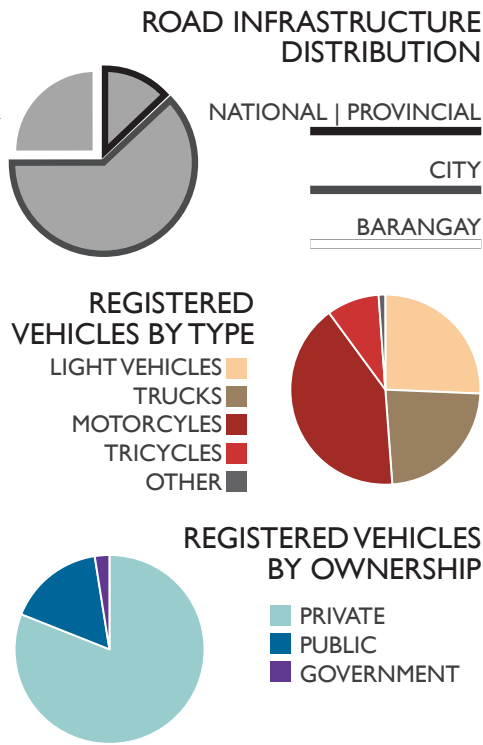
Only one main bus terminal exists in Tagbilaran, the Integrated Bus Terminal (IBT). A cluster of smaller “bus stations” are located by the malls and markets, the two most utilized minor terminals being Marcela (MA) and Agora (AG) This creates congestion and makes public transportation a much less convenient method of travel.

MOBILITY – AIMS & ISSUES

Regional connection is fair but internal traffic flow could be improved. Mobility is inadequate especially between Dauis and Tagbilaran despite their proximity and common heritage.

PROPOSED

The city’s traffic management strategy proposes to improve existing roads and provide street lights on all main streets. Most existing roads are not of sufficient width to accommodate the current amount of traffic. The proposed changes aim to improve public transportation significantly in terms of mobility to diminish the need for private transportation and hence improve traffic flow. The third bridge connecting Tagbilaran’s pier to Dauis opens an artery where heavy traffic flow will be able to transit. This will leave the southern bridge free for smaller, slower, and lighter vehicles therefore increasing the potential of evolving the bridge onto a dynamic waterfront.



III. URBANIZATION & REDEVELOPMENT

Urban planners tend to over-rationalize cities and embrace utopias, but this is a failed model. Cities need room for unpredictability as much as humans do. Cities, like humans, need freedom to evolve overtime. Pedestrian mobility in and out the port is inherently poor due to the lack of human scale. The walk from the main intersection to the terminal itself is unpleasant and long. Implementing a main bus terminal on site offers a new cluster of services that could be of great advantage for transistors, vendors, and service providers. A port development program is already in place. This proposal encourages further investment to upgrade the development to boost up the nearby markets and facilitate internal and regional mobility.

The future vacancy of land on the current airport site also offers the opportunity to plan a substantial area of the city where educational, institutional and ecosystem services could be a priority in a residential area. This pilot project for the redevelopment of the airport site allocates multiple “pockets” of recreational spaces within close proximity of each other with the attempt to create many “oases” where people can establish civic conversation and develop a stronger sense of community.

PIER REDEVELOPMENT – 7.26HA

MAIN BUS TERMINAL

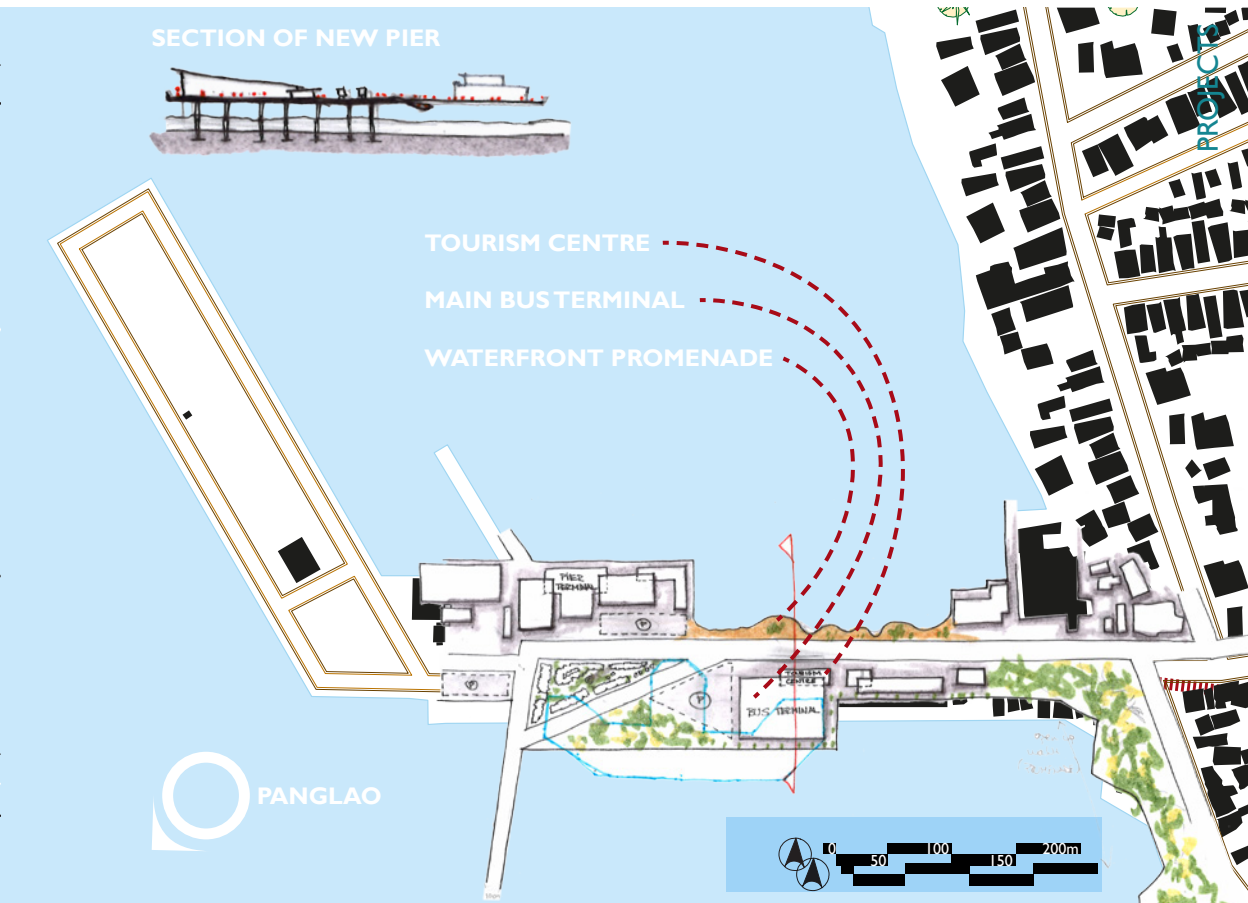
The integration of a main bus terminal is complementary to the existing IBT. This new terminal will focus on strengthening connections to Panglao and Southern Bohol.

TOURISM CENTRE

This centre serves to better establish and promote the culture and tourism in Bohol and Panglao Islands. It is strategically placed adjacent to the bus terminal so newcomers can easily spot it.

WATERFRONT PROMENADE

Building up public and recreational space as well as infrastructure for commercial use intends to develop a more “walkable” quality. The new land use sets up a platform for a promenade with views of the waterfront and the city.



NEW AIRPORT ZONE DEVELOPMENT - 103.6 HA

HOUSING

The area is primarily residential with some light commercial development allocated adjacent to the most transited streets. Social housing is spread out and imixed with private market housing. Depending on the size of the family and the needs of the person, social housing typologies can adopt the shape of a single family home or an apartment unit in a bigger block.

PUBLIC & RECREATIONAL

Allocated every 5 minutes by foot. There's a proposition for a main sports area on the northern part of the development site. This big recreational area will be in between two educational institutions and host sports such as soccer, volleyball, and tennis. One other soccer field is proposed on the southern end of the airport development site.

EDUCATIONAL

Allocated every 10 minutes by foot. Educational institutions are highlighted in blue, they will provide the services for Kindergarten, Primary, and Secondary level schooling. All schools should have an inner courtyard, patio, or an area of similar qualities to allow for social livelihood within the school premises.

WELFARE

Social Welfare institutions are highlighted in purple and will multifunction according to demand as crisis centers for women & children, youth centers, or shelters. These are smaller institutions than the schools and more discrete in architectural qualities. The main entrance should not face the most transited street but the building should be visible from such streets and easy to access.



OUR TAGBILARAN

A RESOURCE FOR INFORMATION
SHARING AND CITIZEN
EMPOWERMENT

Johanna Marttila

Cities are growing and changing in a fast speed, posing challenges to urban planning. Developing countries are most affected by global issues as they lack resources to respond to the increasing challenges. Nevertheless, huge leaps in the field of information technology have brought about new opportunities to conceive and live in cities, offering a possibility for people to connect with one another beyond boundaries.

132 The objective of this proposal is to understand how strategic planning aims to help cities respond to fast transitions and to discover how theory can be implemented in a specific context. The proposal is based on research conducted in Tagbilaran during our initial study trip in January 2016. The research consists of analyses of information, gathered from academic sources, official planning documents, statistics, locally conducted interviews and observations, and group discussions amongst students and instructors. The wished outcome of the research is to develop a site-specific strategic plan for the city of Tagbilaran that is abstract enough for not to impose one-sided solutions, but detailed enough to express clearly the values of the new direction suggested.

The final design proposal is available at www.ourtagbilaran.com

LAYOUT

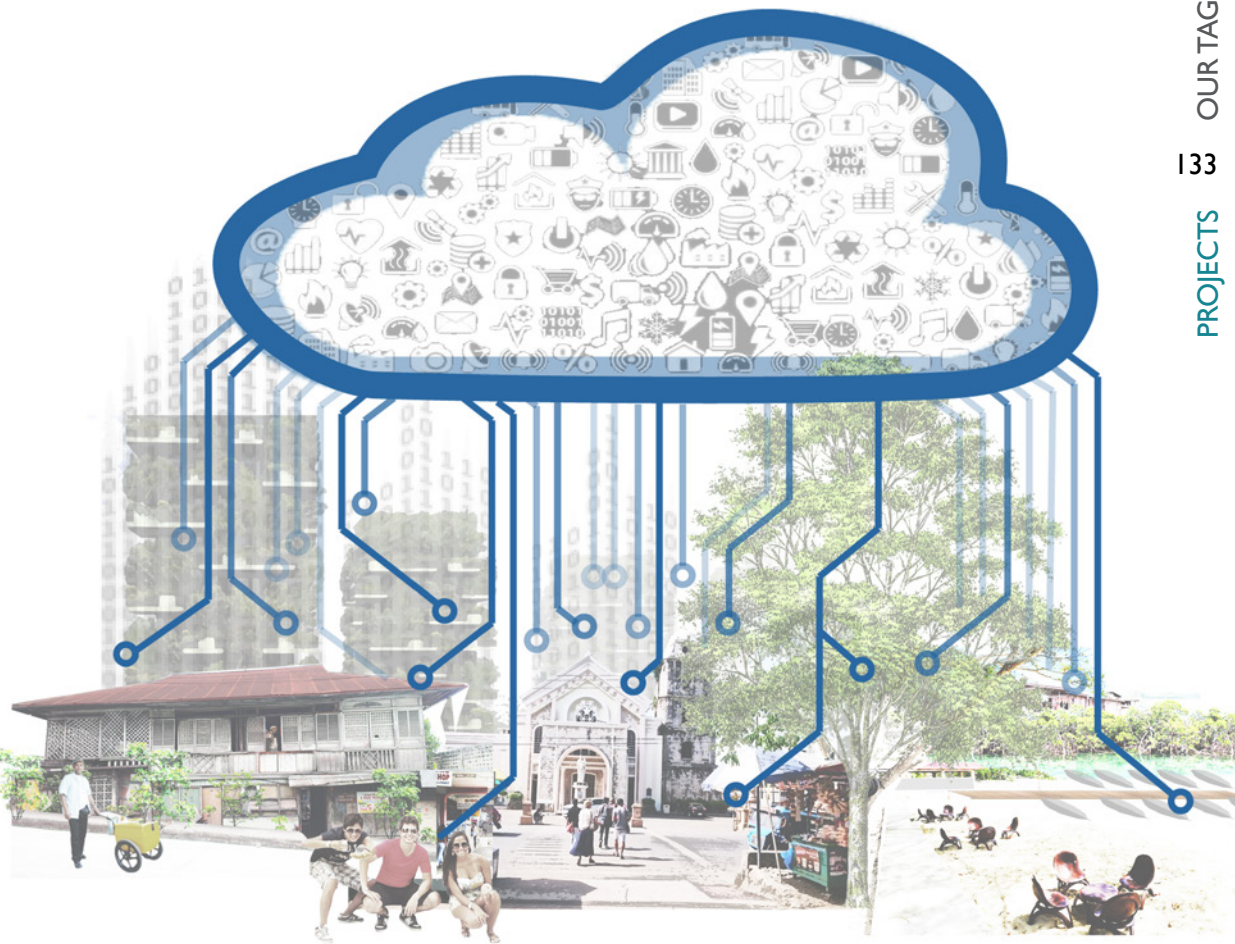
RESEARCH AND THEORETICAL BACKGROUND I

Spatial, Environmental, Economical, Political, Cultural, Social | SWOT SITE ANALYSIS II

Municipal Vision, Worse-case Scenarios | ENVISIONING TAGBILARAN III

Issues, Tools, Stakeholders | "SMART AND LIVELY CITY BY 2045" IV

CONCLUSIONS & OUTCOMES V



I.THEORETICAL BACKGROUND

The research process was guided by an approach to urban planning that focuses in the multiplicity and diversity of human beings, in regards to their needs, aspirations, cultural and social contexts. It starts from understanding the theoretical bases of humanistic and scientific sciences and continues until the practical execution of building and planning projects.(Nordic Five Tech, 2016)

The research started from collecting soft data through interviews and discussions with different actors in Tagbilaran city. Tagbilaran is situated in the Central Philippines, in a small provincial island of Bohol. The city is quite small when considering its dimensions (32,7km2) and number of its inhabitants (91,218, Census 2006) but its population is growing in fast speed (2,4%) posing new challenges to the city. (UNHabitat, 2013)

The aim of the research was to understand how the inhabitants perceive the city and how they can interact with it. Interviews conducted focused in understanding how the citizens get information about the city, their living conditions and what they wished for the future. Interviews conducted with city planning officials focused more on the city planning processes, on how the public is included in them and what is the direction they wish for the future development of Tagbilaran. The information was gathered in an extended version of the SWOT-analysis.

Strategic planning aims to create a more flexible and adaptable framework for planning through promoting diversity and multiplicity of actors - the key attributes of cities. According to resilience theory, it is this diversity and plurality that can makes a city or an organism resilient to changes, as it supports the growth of multiple place-based solutions over homogeneity (Lars et al., 2010). This idea is especially relevant in Tagbilaran, where the local government lacks the resources and capacity to respond to the increasing amount of needs of the growing population.

The strategic plan proposed for Tagbilaran is supported by Michael Gunder's article A metapsychological exploration of the role of popular media in engineering public belief on planning issues which showcases how popular media and planning processes influence public opinion and Saskia Sassen's ideas of Open-source urbanism which introduce the idea of urbanized technologies, that do not only make cities smarter but let people to better communicate with them.

OUR TAGBILARAN

Context Statistics

HOME DATABASE FORUM CLASS ROOM PROJECTS CONTACT

«

»

World Map

Philippines Map

Nation: Philippines

Major Industry Sectors (2014)

53.6 % Services

30.8 % Agriculture

15.6 % Industry

19.7% Underemployment Rate

1.73% Population Growth Rate (2010-15)

People Below Poverty Line

POPULATION: 98M (2013)

AREA: 300 000 km2

CAPITAL: MANILA

Context

Tagbilaran is situated in the Republic of the Philippines in the Central Visayas Region. Tagbilaran is the capital of a provincial island of Bohol, representing the only city in the island.

The city and the nation faces the same issues of poverty and fast population growth. The area is also prone to natural hazards, also known as "The-ring-of-fire".

Region VII: Central Visayas

Province: Bohol

Capital: Tagbilaran

Region VII: Central Visayas

POPULATION: 6,8M (2010)

AREA: 10,102 km2

REGIONAL CAPITAL: CEBU CITY

Province: Bohol

POPULATION: 1,255,128

AREA: 4,821 km2 (2010)

CAPITAL: TAGBILARAN

Capital: Tagbilaran

16.9% Unemployment Rate

2,40% Population Growth

28,8% Below Poverty Line

POPULATION: 96,792 (2010)

AREA: 32,7 km2 (2010)

f g+ t

II. SWOT SITE ANALYSIS

SWOT-analysis is an excellent tool for strategic planning since it generates strategies to guide future development by identifying current internal strengths (S), weaknesses (W), and future external opportunities (O) and threats (T). As strategic planning goes far beyond spatial analysis into considering the different spheres that living environments consist of, an extended version of the SWOT-tool is created in order to map down and gain an overall understanding of, the complex conditions of the case study context.



SPATIAL SWOT

Tagbilaran city manifests issues of big cities, such as of traffic and of pollution. There is a general lack of infrastructure and many of the city dwellers live without access to adequate water distribution, roads or housing (Tagbilaran City Government, 2015). Most of the land area is build up (Philippine Statistics Authority, 2016), leaving little public or green spaces in the city. This, in turn, contributes to the unsafe feeling of the city in the evenings. There lies potential in the new Web 2.0 which refers to the second stage of the World Wide Web revolution, characterized by the change from static web pages to dynamic or user-generated content and the rise of social media (Google, 2016). In the Philippines, Facebook provides free internet, making it an important communication platform. Internet allows the inhabitants of the small island to connect with one another and with the rest of the world.

ENVIRONMENTAL SWOT

Tagbilaran has 13km of coastline (UNHabitat, 2016) but the sea is rarely present in the city, as the majority of the coastline is constructed. There are no adequate wastewater disposal systems in the city which results in heavy pollution to the sea. There is a need for educative schemes for gaining environmental consciousness and in order to reach more environmentally friendly solutions of developing the city.

ECONOMICAL SWOT

Service sector, especially vehicle related services, represents the city's major industry. Still, approximately 60% of the city's population is directly dependent on fishing (Tagbilaran City Government, 2015). There are five malls in the city and numerous amounts of micro businesses. The local city government realized the tax value of micro businesses just some years earlier, which changed their worth over night (Interviews with Government officials, January 2016).

Tourism is seen as the main economic asset of the city, even though there are little facilities supporting visitors to stay in Tagbilaran. A national airport and a regionally connected pier give Tagbilaran the role of a transitional node. A role, which will be challenged in the near future as the city airport is transferred to the neighboring island.

The city government's idea to re-qualify the airport site into an IT-centre (Tagbilaran City Government, 2015) offers a possibility to generate new jobs in an industry that can allow Tagbilaran to connect and compete with global markets. But this vision requires highly educated people in the field of computer sciences, or at least educational strategies to support the growth of this expertise. Tagbilaran City Government has started geographical information system (GIS) training for the planning department and they are interested in collaborating with the local universities in developing locally based urban studies (Interviews with Government officials, January 2016).

POLITICAL SWOT

Currently the public can participate in city or regional matters by attending a weekly public meeting with the mayor or governor, or by listening to their radiobroadcasts and sending text messages to the show. Information concerning urban matters is mainly communicated through “transparency boards” or internet, allowing only a one-way communication between the public and the city planners. If one desires to access or create new knowledge about the city, one needs to go through a hierarchical process leading to the capital or to the regional heads.

There is little information about the city accessible to the public. Information gathered from interviews with Tagbilaran city officials and with city dwellers differ from one another, making it challenging to point out trust-worthy information. It seems information is used as power showcased or hidden according to needs. Lack of transparency and public participation in urban governance opens the way for corruption and strengthens existing centralized power structures. In order to expand the current one-way communication between the public and the city officials into a more reciprocal interaction, the discussions concerning the city should be expanded to public forums.

CULTURAL SWOT

The Philippines was under colonization for long periods of time, thus traces of foreign cultures are evident in their own. Few English and Spanish words are immersed in their vocabulary and many Filipinos speak English fluently. There is a general attitude that something foreign represents development. The lack of appreciation for the local culture is reflected in its poor documentation and preservation. It is manifested as decaying heritage buildings and new developments with global influences rather than local identity. “Any foreign development is good” - attitude encourages privatization of public spaces.

Local universities do not conduct urban studies on the city, and the rare urban courses organized focus on Western modernism (Interviews with University staff, January 2016) rather than treating Tagbilaran as a valuable subject of study. The lack of documenting the city conditions affects also tourism in the area. It is hard to find any information or just a postcard of the city.

SOCIAL SWOT

Informal settlers represent a segregated group in the city which is manifested through poor living conditions, lack of access to public services and spread of social problems. There are many types of segregation: economic, social, patial, ethnic to name the few, and they often work in parallel, enhancing one another. Generally segregation is considered a negative phenomenon as the process enhances unequal living conditions and social exclusion (Dahlmann, 2016). The lack of opportunities affects inhabitants’ possibilities to make changes to their living conditions. Many of the informal settlers interviewed stated to have been living there for many generations.

The prevailing attitude in the city is to consider informal settlers as outsiders who have come to the city from the rest of the region (Interviews with Government officials, January 2016). Gang activity and social problems in the poorest living areas contribute to the idea that the informal settlers are the cause of problems, further enhancing social segregation.

Despite the negative stigma, many of the settlers seem pleased with their neighbourhoods. Many are against relocation schemes, fearing to live amongst other social classes. This type of segregation can be considered as ethno-cultural, referring to a group of people who exclude willingly from others in order to feel safe, part of a community and to avoid racism (Dahlmann, 2016). Segregation processes are not solely negative and involuntary but they can be voluntary and carry positive value in reinforcing group identities and community feeling.

III. ENVISIONING TAGBILARAN

This section looks into how strategic planning is conducted in Tagbilaran by examining the municipal government planning documents. Furthermore, it will examine the future development of the city and how plans respond to the urban conditions identified in the SWOT-analysis chapter. The chapter is followed by worst-case scenarios that represent alternative visions of Tagbilaran’s future if the current planning mode is continued.

MUNICIPAL GOVERNMENT VISION

Img. 13 Tagbilaran city government, “A Highly Livable City by 2020.” The vision is presented through an updated land-use plan proposal, which covers a period of 10 years. It envisions Tagbilaran as “A highly liveable city by 2020” (Tagbilaran City Government, 2015). The proposal visualizes Tagbilaran as a global megalopolis with a skyscraper skyline. The proposed land-use map assigns the coastal area for a new use, displacing large quantities of informal settlers to the borders of the city. In here segregation is used as a planning tool to enhance the phenomena instead of treating it as an issue.

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According to Philippine legislation, city government has to offer relocation sites and programs for alternative source of income when displacing dwellers (Philippine Human Rights Information Center, 2013). But laws become relative when there is no trust-worthy documentation of the numbers of people living in the settlements or of their livelihoods. Relocation sites positioned far away from the city centre, limit the settlers’ possibilities to reach their existing jobs and social circles. A local UNHabitat officer describes how many relocation projects fail, as people end up returning to their original settings. (Interview, January 2016)

To deal with segregation, one needs to first understand the reasons behind the phenomena, to understand the local context and what factors influence the selective migration patterns in the city. These include financial resources, housing choices, experiences and images of different groups. Areal based social and spatial projects are a common strategy to battle gentrification, as improving living environments and opportunities of people can have strong impacts in their lives. However as the issue is not area or people based, but derives from a bigger set of issues in the society, there is a need for a larger scale change.



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ABOVE | Rendering produced by the City of Tagbilaran to indicate their 2020 vision

“Segregation is often discussed in relation to certain population groups or neighbourhoods. However, it is a result of general urban development, local contextual factors and behaviour of different population groups.”
(Dahlmann, 2016)

BELOW FROM LEFT TO RIGHT | Current situation of the informal settlements by the sea shore and prediction for the future. Photo & collage by Johanna Marttila



WORST-CASE SCENARIOS

The image presented by the Tagbilaran city planning authorities has no connection to the city of Tagbilaran. It portrays a solution to the increasing housing needs, which will not serve most of the city dwellers, as they could not afford to live in expensive high-rises. Nevertheless the vision seems to have been widely accepted by the public. It is a popular image also in the academic circles. Michael Gunder (2011) explains from a psychological point of view, how planning and contemporary media, through media-strategies that use catchy images and phrases, shape the public aspirations as to what is desired for the future of our cities. They work as powerful tools in the shaping and constructing of public awareness and opinion about planning issues.

The city government’s vision represents one-sided idea of a globally competitive city that Patsy Healey criticizes. It is an image of a city that serves a small amount of people, and for gaining economic profit over public wellbeing. It represents a top-down approach to planning rather than the needs of the public. Using land-use plan to define future strategic plans leaves little space for rapid changes, adaptation and for the growth of new solutions, as it is strictly connected to the governmental level decision-making processes. There is a need for new, more inclusive tools of urban planning that would allow locally based, participatory and so a more resilient way of developing the city.

Contrasting the city government’s vision, worst-case scenarios demonstrate how the city will look in the future if current issues and future challenges are not addressed. Traffic, pollution, poverty and big socio-economic differences between people will increase, resulting in an “Unliveable City” for most of the city dwellers. The fast population growth of Tagbilaran is mainly due to migration patterns coming into the city from the rest of the province. People come after jobs and end up settling down informally as the city government does not have the capacity or resources to provide adequate housing for the dwellers. The skyscraper-solution proposed by the local government will serve only to a small group of people; the already large number of informal settlers will increase, leading to a “Super-Segregated City.”

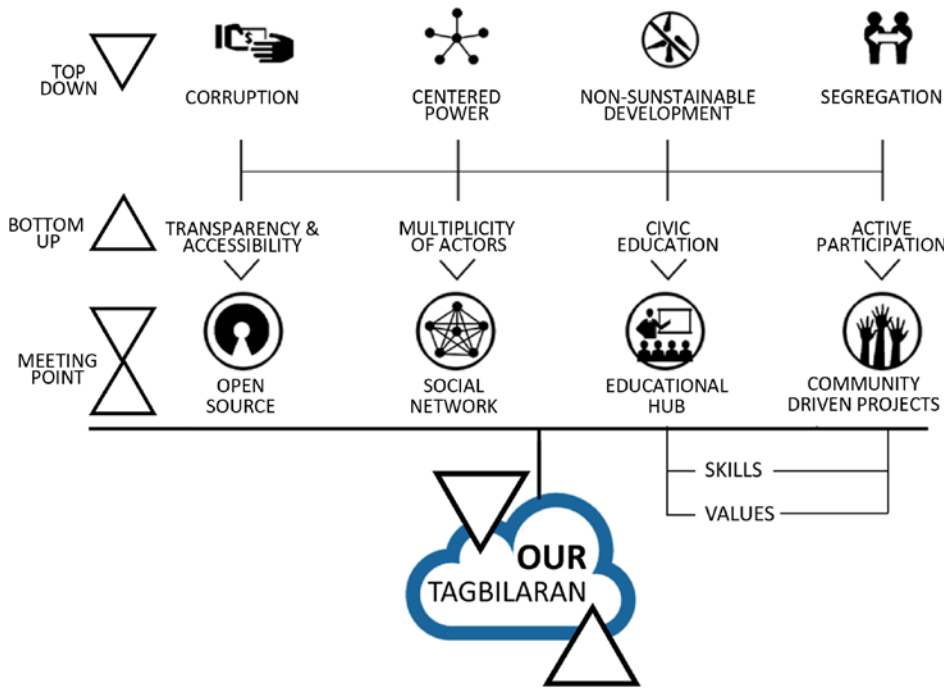
RIGHT | Prediction for future Carlos Garcia Perez Avenue.
Collage by Johanna Marttila



IV. “SMART AND LIVELY CITY BY 2045”

Mission of the new strategic plan for the city of Tagbilaran, is to move away from the current one-sided and top-down approach of urban planning, into a direction that supports multi-conceptual city visioning processes created by a multiplicity of actors. This direction recognizes the value of people creating their own dwellings and neighbourhoods and aims to develop it. The following objective is to create tools that promote participatory, locally based and informed mode of developing cities through Web 2.0. The proposed vision envisions Tagbilaran as a Smart and Lively city by 2045. A city that grows from local needs and potentials, and with the help of information technology promotes active, informed citizen participation in urban planning processes.

The idea is to turn around Gunder’s equation of planning and contemporary media as the shapers of public aspirations (2011) into a state where public aspirations can influence the content of planning and media. The vision reflects upon a longer period of time, as the aim is to reach bigger scale attitude changes in the society. It consists of different strategies, starting from small-scale place-based practical solutions and arriving to bigger idealistic changes in the public opinion. These changes will promote the value of public opinions and change how people interact with their living environments.



ISSUES AND STRATEGIES

Bottom-up strategies respond to the top-down planning approach where a meeting platform is created for the two sides. The platform offers a strategy of transparency. It powers information-sharing by setting up an open-source database focusing on city development. Open-source rejects the idea of private intellectual property. Its key attribute is that anyone can see, use, copy, or contribute to its content. Contributions are assessed by their utility or merit over their profitability or their potential to concentrate credit. (Dominick, 2011)

Saskia Sassen, a Professor of sociology in Columbia University, talks about Open Source Urbanism. She calls for urbanized technologies that allow people “to talk back to cities” and with this implement user-driven change. Saskia longs for “Urban Wikileaks” that can infiltrate the strictly vertical practices of urban planning. OurTagbilaran aims to work as a tool for creating alternative paths for the city development by promoting participation in the envisioning processes and the creation of place-based solutions.

In order to increase the value of public opinion in city planning processes, large amounts of people need to get inspired to participate and create public data. Designing user-based tools to gather and analyze data from the public become essential. Facebook offers a channel through which the platform can be promoted but due to its social-bubble effect, caused by algorithms, information is grouped and give one-sided views to users. OurTagbilaran, is a place where one can gain a wider view on matters concerning the city. This platform is a place where everyone is welcomed to discover the city and what its future should look like.

Educational strategies are applied in two levels: value-gaining and skills. Value-gaining process is about building-up the social and intellectual capital of the city dwellers to act upon their living environments. It is about raising consciousness of the local cultural, social and environmental assets and issues. The process is shaped and supported by shorter term strategies rising from the platform activity. These activities follow the framework of the platform, promoting transparency, information sharing and resilient modes of growth.

Segregation is firstly battled through promoting area-based projects but agenda behind this is to promote social equality. The positive group and identity-making side of segregation is recognized but the aim is to eliminate its negative effects by offering a place for everyone to see, comment and interact with different groups and projects formed in the city.

TOOLS: OURTAGBILARAN

OurTagbilaran is an open-source, educative, social media channel, public poll and data analysis tool - all in one site. The platform works as an open-source database for creating local urban knowledge. Anyone is free to sign in and contribute to the material provided. The idea is to promote Tagbilaran as a valuable subject of study and to enhance citizen participation. The database can serve not only for the local inhabitants but also for external actors, such as, tourists and investors.

The platform is educative in nature. Urban Lab represents an organization that manages and initiates the content flow. It is the base and extension of the platform that links it with local groups and similar global organizations. Fab-lab and its spin-offs represent successful examples of organizations that focus on local-based activity while belonging to global networks. Urban Lab could provide a similar workshop focused on rooting the idea of open-source urbanism in the city by organizing events and workshops. Forum opens the city development to a wider audience. A popularized form of the SWOT-analysis tool, YOURTagbilaran, helps the public to visualize and identify the current and future SWOTs of their city. Data gathered from the public SWOTs represent the public's wishes and concerns about the city's future.

The idea of creating an interactive tool to gather and analyze data from the public, responds to Patsy Healey's request to finding ways that support collective vision-making processes of common futures (2002) and Saskia Sassen's call for urbanized technologies that promote horizontal practices (2011). It works as a tool that recognizes the vision-making processes together with public media and aims to empower people in creating their own ideas, strategies and responses.

Anyone can add a project to the site via an established a format. The format directs participants to focus on how their proposal would affect the city. Participants are to make their own SWOT-analysis of the city and showcase how their proposal responds to the strategies derived from their site analysis. When published, the proposed SWOT is compared to the public SWOT, giving everyone the same terms of evaluation. Most voted projects, and with the best SWOT score, gain the most visibility on the website. Project Commons showcases projects in three stages: projects in progress that seek collaborators or participants, completed design projects that seek investors, and completed projects that can be evaluated, copied and learned from. It connects the already existing and potential future locally based projects under a common discussion and evaluation platform and offers anyone the possibility to join.



A Resource for Information Sharing and Citizen Empowerment

OUR Tagbilaran

Urban Lab

MY Tagbilaran

Map YOUR Tagbilaran

Project Commons





A Resource for Information Sharing and Citizen Empowerment

I'm a paragraph. Click here to add your own text and edit me.
It's easy. Just click "Edit Text" or double click me to add your own content and make changes to the text.
I'm a great place for you to tell a story and let your users know a little more about you.

Content



OUR Tagbilaran

Background

Issues & Strategies

Vision

Mission



Urban LAB

Contact

Research

E-Courses

Events



YOUR Tabilaran

Best thing in Tagbilaran...

Issues in Tagbilaran...

I wish Tagbilaran will...

I wish Tagbilaran will not...



PROJECT Commons

Add A Project

Participate

Crowd Fund

Completed projects

146

OUR TAGBILARAN
PROJECTS

147


STAKEHOLDERS & PROCESS

The first implementation phase of the new strategic plan is the set-up of the theoretical and functional framework of the web-platform. The second-phase consists of founding the Urban Lab. The on-going collaboration between the three universities Aalto, BISU and NIT, provide an opportunity for the phase two. The universities can work initially in collaboration to manage and produce content for the platform while using it as a tool to document the process of developing locally oriented urban courses. Urban Lab can ally with FabLab, (a multimedia lab at BISU sponsored by NIT) and start connecting with various networks working in developing tools in grass-root levels.

Phase three focuses on spreading the use of the platform outside academia to reach the public and possible collaborators. NGO's and citizen aid groups working in the city, are invited to the platform to seek information, volunteer or invest and to collaborate. Urban Lab can offer expertise in the fields of urbanism, architecture and IT-technology, and global connections – all things that could benefit also the governmental level urban practices. Wider public is invited firstly through the popularized SWOT-tool and then by showcasing projects that respond to results of the public SWOT.

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Phase four is about realizing projects in the city. It goes from organizing smaller scale workshops of improving expertise in computer sciences and in mapping information of the city to bigger scale building projects. Developers of all types can benefit from the platform as it can be used as a tool for gathering data on the city. Ideally the platform will grow into such an influential source of information and of city development initiatives that the local government will not ignore its benefits. Empowered citizens can start to demand more from their leaders to bring about a change where public participation is considered as an essential part of the city planning processes.



A Resource for Information Sharing and Citizen Empowerment

[OUR Tagbilaran](#) [Urban Lab](#) [Map YOUR Tagbilaran](#) [PROJECT Commons](#)

YOUR Tagbilaran




Tell us how YOU Tagbilaran at what do you value in the city and what would you change? What are the challenges for you in Tagbilaran and how do you wish the city will become?


YOUR Tagbilaran is a public pet and data analysis tool, representing public's opinions and ideas of the city. This first page shows the results of the 1st poll. Do you agree?


Sign in to save your marks


Map Your City

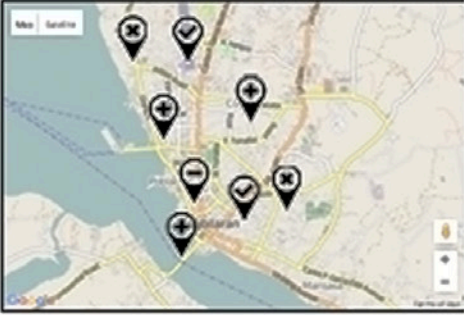
Pin your favorite and most problematic sites in the city, or sites you see holding future potential or challenges.

 I Value


 I want to Change

 I See Opportunity

 I See Problematic



Public Opinion





Most Valued Assets of Tagbilaran

TOP1 #Hospitality

2# Cultural Heritage

3# Food







Most Needed Changes in Tagbilaran

TOP1 #Health care facilities

2# Jobs

3# Housing







Common Future Visions

TOP1 #Eco-Tourism

2# Global Investment

3# Education for All






Common Future Challenges

TOP1 #Increased Pollution

2# Airport Closure

3# Corruption



OUR TAGBILARAN
PROJECTS

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V. CONCLUSIONS & OUTCOMES

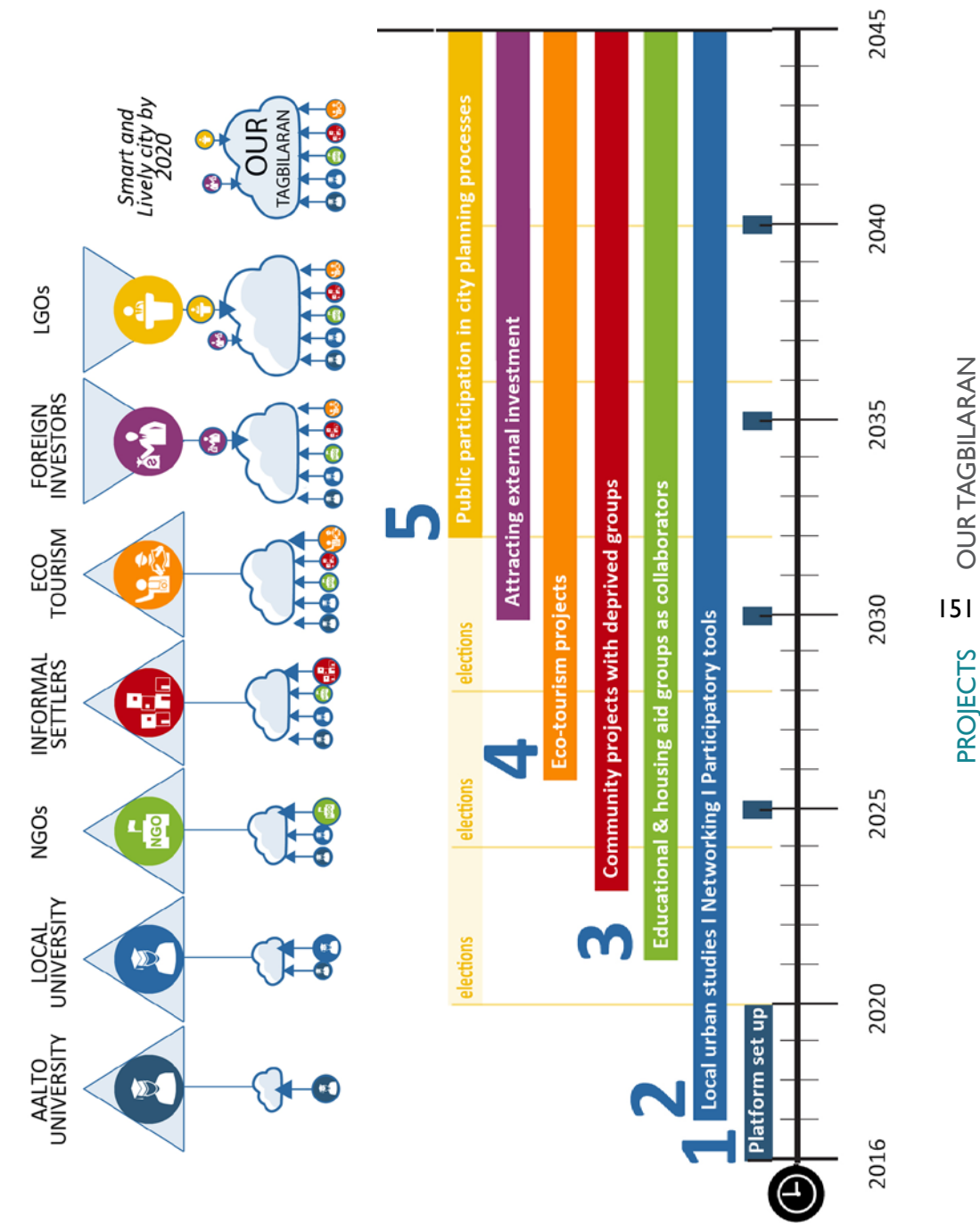
The platform activity aims to generate bottom-up strategies that can help Tagbilaran gain resilience to change as the city is under many fast transitions and located in an area prone to natural hazards. The rise of Web 2.0 has given public opinion more value. It can work as a tool for planners and developers to gather public data and as a tool for participation. The strategic tool OurTagbilaran aims to involve a larger scale of actors in the city-visioning processes through information sharing and citizen empowerment. It promotes the creation of alternative visions for city development, representing a more locally based, informed and sustainable direction in planning.

Skill development in IT-technology offers the potential for Tagbilaran to connect with global markets in a fast developing field that requires little infrastructure. Value gaining processes represent bigger scale changes in attitudes people have towards the city and their roles in it. These processes support the build-up of intellectual and social capital of the local people. Interactive tools help the public to map down and shape the public opinion about the city.

The aim of the platform is to work as a framework that inspires and guides development in a more sustainable direction rather than imposing specific solutions. The empowerment processes focus in developing and appreciating the local expertise. This can help people see the value in self-sufficiency and place-based solutions. The aim is to show the local government the value in grass-root participation between the authorities and actors in the city.

The wished outcome of this proposal is to spur discussion on how strategic planning should be conducted today. The strategic plan proposed for Tagbilaran city is scalable and applicable to other places and it represents a framework that allows further development and examination. Especially the user-based design of the platform could be further discovered through a master thesis.

The wished outcome of this publication is to explain the strategic plan formed for the city of Tagbilaran to a wider group of people that could help support the continuation of the university collaboration and the realization of OurTagbilaran-platform, or in turn get inspired in creating similar projects responding to the needs of cities in transition.



BOHOMOVE

ICT-ASSISTED DEMAND RESPONSIVE TRANSIT SERVICE FOR TAGBILARAN

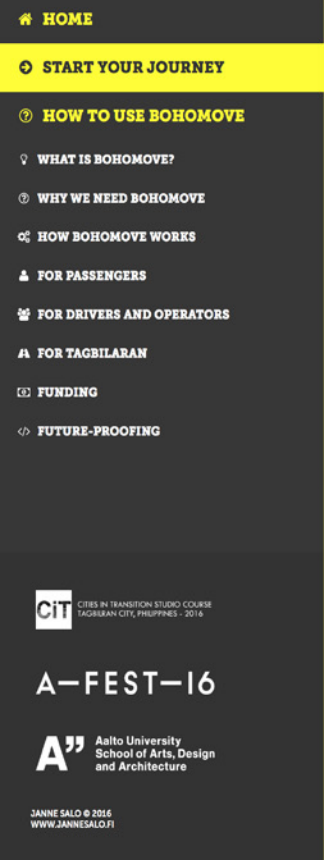
Janne Salo

BohoMove is a smart-device assisted service based model to offer mobility demand responsively. It is designed to address issues detected in Tagbilaran, such as: lack of functional public transportation, increasingly growing motorization and traffic induced problems in the urban scene. Based on new urban transit paradigm and MaaS (Mobility as a Service) approach BohoMove will be designed according to the following guidelines: needs of people instead of traffic, future-proofing, service-based, financial feasibility, direct connection between passengers, operators and local government. Core foundations of BohoMove are following: smart-device assisted, demand responsiveness and service-based models. The power of this new service lies in real-time location data of vehicles, users and route-optimization algorithms.

The final design proposal is available at www.bohomove.ph

LAYOUT

Development Model, New Paradigm, MaaS | EVOLVING URBAN TRANSIT I
THE CONCEPT OF BOHOMOVE TRANSIT SERVICE II
FUTURE DEVELOPMENT III



BohoMove. Best way to move.

Start your journey here!

From: _____ To: _____

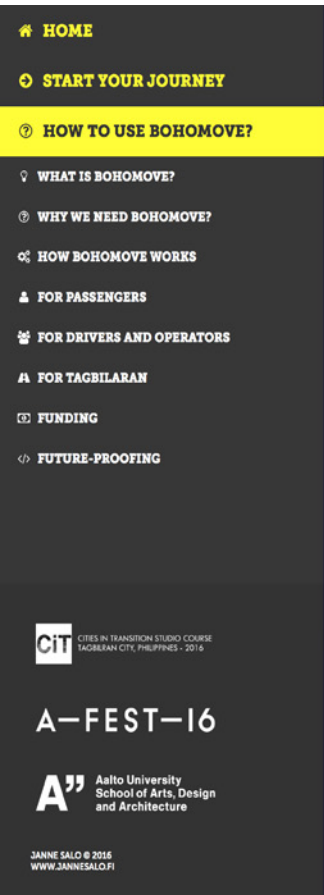
PST! Actual functionalities not yet implemented.

Explore project >

How to use BohoMove >

Download design report >

BOHOMOVE



Get BohoMove.



Access web-application
on bohomove.ph



Create BohoMove account.
It's free.

Start your journey.



Let BohoMove locate
you.



Tell where you want to
go.



Walk to pick-up
location.



Enjoy your ride.

When you arrive to destination.



Payment will be automatically
charged from your BohoMove
account*.



...and it is always possible to pay
with cash**.



Rate your ride.

PROJECTS

I. EVOLVING URBAN TRANSIT

PATH DEVELOPMENT MODEL

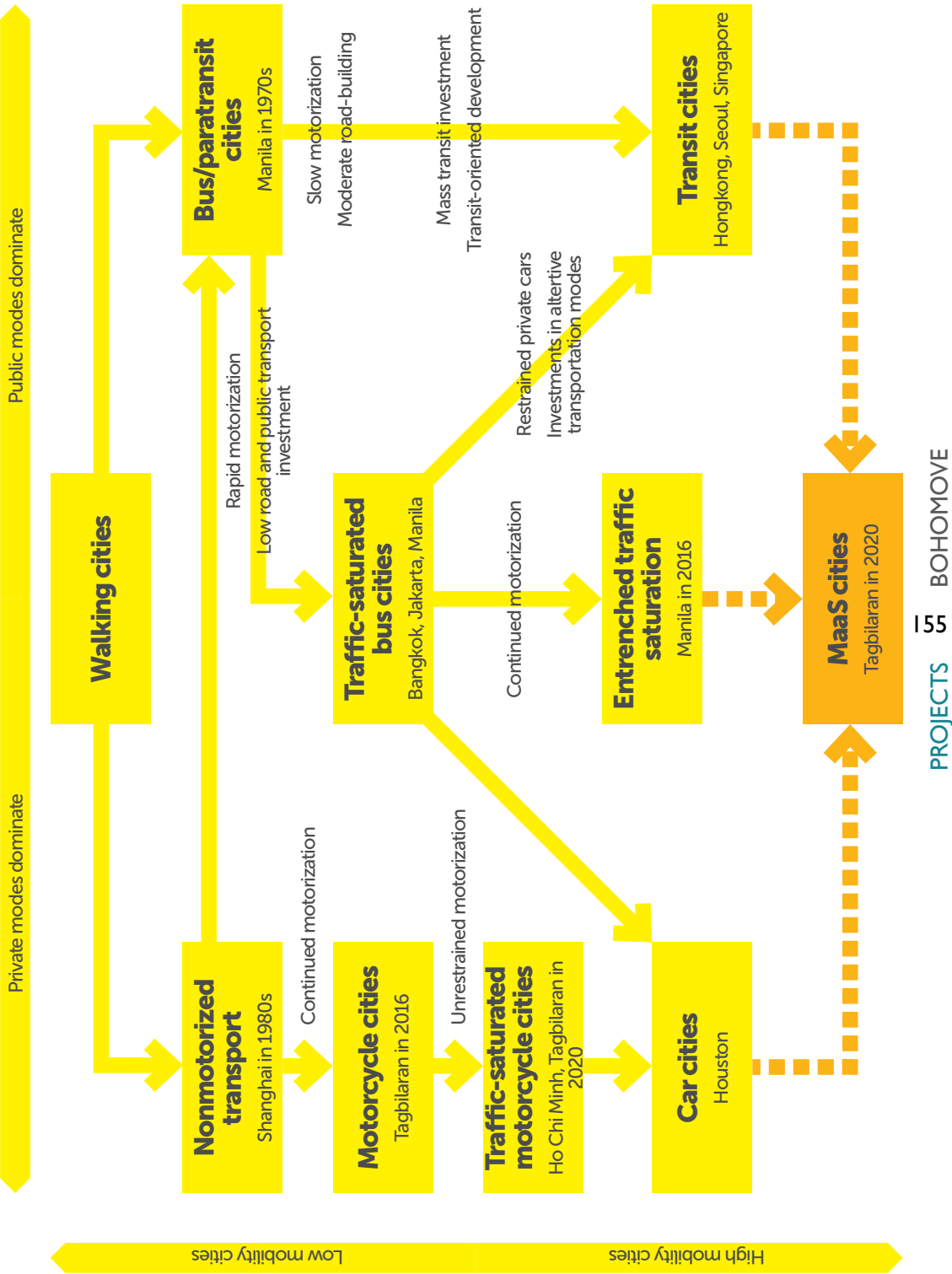
Path development model is based on Barter’s City Typology and Transport Development Paths (2004). It defines observed city typologies based on the primary and relevant transport methods. The high overall amount of tricycles and motorcycles in the city of Tagbilaran can categorize it as a “motorcycle city”. The defining feature for a motorcycle city is that majority of the movement is provided by private modes. Tricycles serve as public transport yet are comparable to taxis in regards to the service which is considered closer to private transportation.

According to Barter a motorcycle city is a step on the road to a car city due to continuing motorization. Despite overall car ownership percentage is still relatively low, as 47% of households own a car, the Philippines is considered to be the fastest growing market for cars in the near foreseeable future (Lucas, 2014). The Philippines’ growing economy accompanied with the rising of the middle-class population, sees cars as desired status-symbols.

NEW URBAN TRANSPORTATION PARADIGM

In 2009, the Asian Development Bank (ADB) recognized the need for paradigm change in urban transportation. Main topics of new urban transit paradigm focused on future-proofing, feasibility, participation and a people-centric approach. Highlighted, in the following page, suggested new approaches are compared to old urban transit paradigm.

Recent proposals, such as the Comprehensive Land Use Plan (CLUP), address to traffic issues in a way that is based on the old paradigm: road improvement plans focus on increasing the road capacity to meet forecast demand. Proposed solutions are engineering-centric and consider traffic over people. Planning is made for a narrow selection of transportation modes – often cars – instead of focusing on people’s mobility demands. Typical values in transportation planning see accessibility over mobility and speed over frequency (Walker, 2012). Nevertheless, in general urban transportation, especially public or semi-public, users value accessibility and frequency over mobility and speed (Walker, 2012). This private-biased value choice is part of old dominant paradigm.



MAAS: MOBILITY AS A SERVICE

Mobility as a service (MaaS) is a concept where different forms and modes of transportation are packaged together with an ICT-assisted application. Design concept of MaaS was first described in a publication by the Finnish Ministry of Transport and Communications (2014). Passengers are seen in a whole new role in the transport system as the service will be created with the help of passengers to serve their demands.

A notable and well-known MaaS provider is Uber but other local services of different scale operate as well. Based on recent events in Indonesia it is evident that smart-device assisted, private transit services are to strand to the Philippines (Anon, 2016). The Philippines smart-device penetration is growing fast and lack of strategy on local level transportation development can deter the spread of services similar to Uber, Go-jek or Grab.

The arrival of mobility as service platforms has caused confusion at the governmental level since it is undefined if these services are illegal or not (Anon, 2016 and Yuniar, 2015). As a result, these companies have been operating on a grey zone outside governmental supervision. However, user-centric approach offers superior service-level and cost-effectiveness, thus attracting customers that build MaaS through a common platform.

OLD PARADIGM	NEW PARADIGM
Mobility	Accessibility
Traffic-centered	People-centered
The future is ignored	The future is central
Infrastructure	Service
Building	Managing, integrating
Affordability is assumed	Affordability is part of the design
Unified principles	Adaptive principles
Strong central government	Strong city authority
TRADITIONAL PUBLIC TRANSPORTATION	BOHOMOVE
Infrastructure heavy public transportation projects.	Service-based public-private partnership model.
Bus-Rapid-Transit service (BRT)	BohoMove
Tramway projects	Kutsuplus (Helsinki, Finland)
	Über (worldwide)

II.THE CONCEPT OF BOHOMOVE TRANSIT SERVICE

The main benefits for passengers are increased accessibility, safety and affordability. With BohoMove passengers are able to order a ride anywhere in the city without spending time to find a free vehicle. If passengers happen to be outside popular traffic nodes, the application can save valuable time and effort. Passengers are able to rely on BohoMove as the system predicts estimated time of arrival for pick-up and drop-off.

BohoMove drivers are obliged to attend traffic education courses and drive according to traffic guidelines which will be specified by a supervising institution such as Tagbilaran City Traffic Management Office (TCTMO). Supervised transit service provides rides that respect the passengers' safety. Location awareness can be used also to track location of certain users when using the service.

This service offers increased mobility for the same price as the current alternatives which are unmonitored or unsupervised. One of the main advantages of predefined payments is predictability: passengers know how much the service will cost. It is also possible to optimize a route if the passenger wants to get the cheapest possible connection.

For drivers and operators benefits are secured steady income and free traffic education. Securing drivers daily revenue will be easier with BohoMove as the system finds customers when they need mobility services. This also reduces unnecessary driving which essentially saves fuel and maintenance costs.

Traffic education as a part of BohoMove service is based on the idea proposed by a university official in particular who was determined to solve chaotic traffic with education. As a part of BohoMove, drivers are provided education about traffic rules, safe and sustainable driving. This education will be continued as long as there is a need for it. BohoMove can be seen as a prestigious institutional unit which greatly enhances further career opportunities for drivers and thus addresses at some level socio-economical issues.

FUNDING MODEL

Affordability is a key element when planning public transportation projects in developing countries (Kyte, 2012). BohoMove is planned to provide increased level of service at the same rates as the existing models. Funding for running operations such as server infrastructure, data connections and smart-device procurement model are funded with data services sold to private enterprises.

The main funding methods are user-profile, search-query and location based advertisement. BohoMove service records all journeys, location queries by passengers and vehicle location data. The data will be analyzed and processed to provide different ways for advertisement for businesses. In addition to businesses, stored data is used to provide vital urban accessibility, mobility and movement pattern analysis for the City of Tagbilaran and all related offices, such as: City Planning and Development Office (CPDO) and Tagbilaran City Traffic Management Office (TCTMO).

Pricing will be based on tiered ranks where individuals or small enterprises are able to access the service for a relatively low price. Services sold for medium and large scale businesses are priced differently. This approach supports the dominant business variation in Tagbilaran which is mostly small scale enterprises.

FUTURE-PROOFING

Independent from any chosen transport technology there is always leeway for unforeseeable changes in the transportation paradigms. Based on trends, several proposed revolutionary changes are expected in urban transit. Rapid evolution of electric vehicles might suppress the vast amount of fossil fuel based vehicles in short amounts of time. Autonomous vehicles are a common interest of car manufacturers like Tesla and software companies like Google.

As the future is hard predict BohoMove provides the best possible viability for a resilient form of urban transit. It is not tied to any single transport technology, it is fluid to adapt to changes, and it focuses on people's mobility demands instead of traffic demands. BohoMove service model also gives freedom for local government to support selected ways of transportation as well as public participation as they have opportunity to choose a preferred mode.

PHASE	EXPERTISE	STAKEHOLDERS
Technology preview	Coding Web development Device technology	universities (computer sciences, engineering) teleoperators
Platform design concept	User-interface design Useability testing	users universities (design, computer sciences) drivers, operators
Service model concept	Service design Concept evaluation Local knowledge	users universities (service design) consultants drivers, operators
Economical model evaluation	Economical analysis Statistical analysis Funding management Economy forecasting Customer profiling	universities (economics) City of Tagbilaran companies sponsors teleoperators
Branding and marketing	Brand creation Marketing Customer profiling Local knowledge	users branding agency City of Tagbilaran drivers, operators
Mobility data analysis	Data analysis Visualization Urban planning Land use planning	research institutes universities land use planning City of Tagbilaran businesses

SCALABILITY

BohoMove is designed within Tagbilaran context but as a concept it is scalable and replicable. A service-based approach guarantees that the concept behind BohoMove will work with small adjustments in a same size or larger cities in the Philippines. The implementation in Tagbilaran can be seen as a stress test for this type of transit service. If successful, then the model can be scaled up to a bigger size city, for example, Cebu. Ultimately, BohoMove could be used to solve traffic issues in metro-Manila.

Justification to start from small, yet growing, city of Tagbilaran is to refine both the service and technology concepts. Being also a novelty in the field of urban transportation, research of effects of BohoMove should be conducted within a manageable zone.

III. FUTURE DEVELOPMENT

Connection between land use planning and urban transportation is present in all cities around the world. Traditionally urban transport has been considered infrastructure oriented and due to the physical nature of movement it will always, to some degree, be based on infrastructure. However, recent changes in urban transport have favored a service-based model due to the substantial benefits of this approach. Infrastructure centric transportation planning has been considered as a slow to adjust factor in cities. A new service-based model such as BohoMove could potentially create yet to be uncovered changes in urban life and land use planning.

Due to the limitations defined by the course schedule weaknesses must be addressed in the next phase of this project. It is also obvious that the nature of the possible next phase would be very different compared to this design process. A multidisciplinary work group consisting of various needed expertise would be obligatory. Also, longer field work and collaboration with local stakeholders such as potential users, drivers, city government and investors would be much needed.

Despite of the challenges that arose during design process, BohoMove can be seen as an opportunity for Tagbilaran and involved collaborators, especially BISU and Aalto universities. The BohoMove concept has potentials on multiple levels to create something new and innovative whether it is research on urban transit, collaborative service-design process or actual running of the service.

BRIDGING THE GAP

CONNECTING TAGBILARAN AND PANGLAO ISLAND

Théophile Paquet

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Tagbilaran is on the verge of becoming a very congested city. The road network is reaching its maximum capacity and since enlarging the roads is not possible anymore most of the sidewalks have already been removed. The main traffic issue is the fast growing proliferation of tricycles. These are a cheap and convenient way to go around the city, but are present in high numbers and cause congestion as most of their drivers lack formal driving education. Due to the city's location, heavy traffic traverses the city centre to go into any direction, because all the mains roads of the island converge at the central square. This causes pollution and danger to the inhabitants of the city. Another issue is that, as recent studies show, most of the Filipinos want to own their own cars. With improving living conditions and population growing fast this will soon pose a problem, as the number of cars in town will grow exponentially. The traffic of the whole center of the city might reflect Manila's traffic.

RIGHT | Dauis Bridge proposal at Stage III (2040)
Rendering by Théophile Paquet

LAYOUT

- ANALYSIS I
- TAGBILARAN PIER | NEW BRIDGE II
- DAUIS BRIDGE III
- TAGBILARAN BRIDGE IV
- CONCLUSION V



I.ANALYSIS

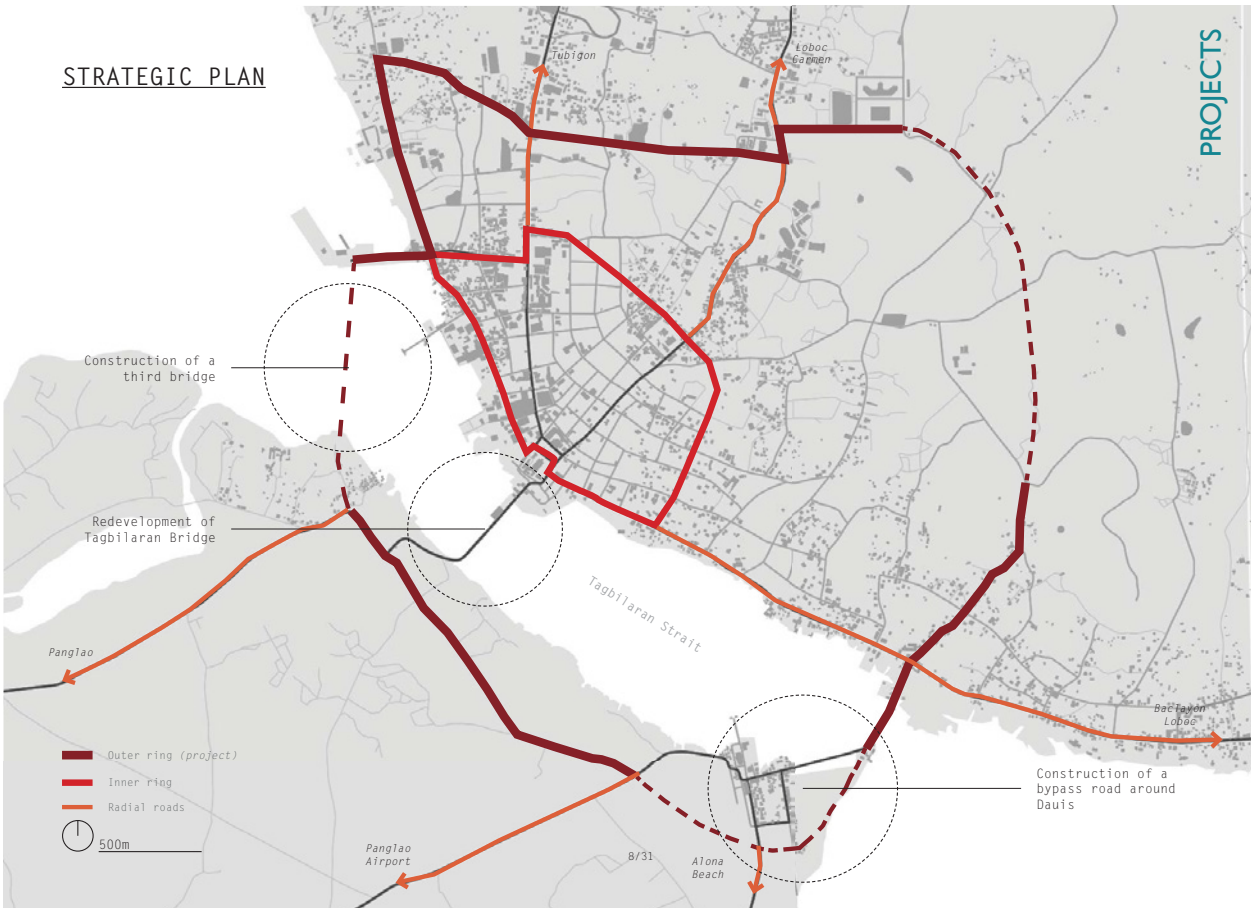
The city of Tagbilaran is located on the southern west side of Bohol Island, in the Central Visayas Region of the Philippines. The city is the most important in the island being the provincial capital, most populated, and economic center. Its population is about 118,794 (Census, 2015) and will grow to 136,800 people by 2035. Tagbilaran was founded in the XVIII century by the Spanish colonialists. It is settled on the shore of the Tagbilaran Strait which makes a separation between Bohol Island and Panglao Island. The city has a small regional airport and a cargo and passenger port. Panglao Island is famous for hosting many touristic resorts due to its white sand beaches.

Concerning aerial transport, Tagbilaran’s airport will soon be closed. It is a small airport currently situated close to the center and cannot expand more. Many recurrent problems made the provincial government launch the construction of a brand new international airport on Panglao Island. This new airport is expected to increase by 1000% the number of passengers arriving in the province every year. Flight from all East Asia will be possible. The main goal of this huge investment is to bring many tourists, especially on the very same island where the new airport is being built. Panglao Island is famous for its beaches, especially Alona, and many tourists already enjoy the pleasant conditions of the island. The new airport is creating the prospect of an economic boom in the region, and many hotels are planned to be built on Panglao.

While such a project brings many critics, it is reasonable to expect that it will strongly influence the traffic conditions in the region, especially in Tagbilaran. With the new airport and hotel area being located on Panglao Island, the only way to reach mainland Bohol is through Tagbilaran by two bridges that link Tagbilaran and Dauis. The National and Provincial Governments are also planning two major infrastructures in the north side of Bohol: the Ubay Airport and the Friendship Bridge, which will link Bohol and Cebu Islands.

All these factors are definitely a reason to study strategic plans for the province and the city of Tagbilaran. A system of ring roads should be implemented around the city to divert most of the crossing traffic around it, using existing enlarged roads and new segments. Dauis, on the Panglao side is already becoming a suburb of Tagbilaran, and should be included in this large scale plan. This strategic plan for the two cities can only work if a third bridge is built on the Tagbilaran Strait, more west than the other two that are already quite busy. The existing two bridges should also be redeveloped to match the overall planning expectations for the road network. The goal of this proposal is to present three different possibilities for development of the Bohol-Panglao Bridges, staged in 3 steps, until 2040.

STRATEGIC PLAN



II.TAGBILARAN PIER | NEW BRIDGE

Tagbilaran Pier is the accumulation of a 250m long causeway and a L-shaped land reclamation. The pier hosts Tagbilaran Port, divided in two sections: cargo and passenger traffic. The port is the main gateway to Bohol Island: 2,000,000 incoming passengers (Manila, 2013) and 4,379,558 tons of cargo (Manila, 2013) go through its gates. It has a capital importance at the provincial level, but suffers from its dead-end position at the pier. The port generates significant vehicle traffic that has to cross the city to reach it. Thus it generates a nuisance and congestion to the nearby roads.

This part of the project is a proposal for the implementation of a New Bridge towards Panglao Island, starting directly from the pier. The bridge would start nearby today's entrance to the port, and land on Panglao Island in the Totolan Area, connecting the pier to Panglao's circumferential road. This new bridge would be about 1km long. It should be a real bridge and not a causeway in order to allow water to flow properly into the strait. The goal of this plan is to redirect part of the traffic coming from the harbor and mainland to Panglao Island without having to go through the city center or the old Tagbilaran Bridge. This 2x2 bridge would easily handle the future needs for traffic.

This new bridge would anticipate serious urban development given the importance of this new infrastructure. The development plan for the new bridge is divided into 3 stages: 2020 – 2030 – 2040. This division allows eventual unforeseen modifications so the development can adapt to future needs.

STAGE I - 2020

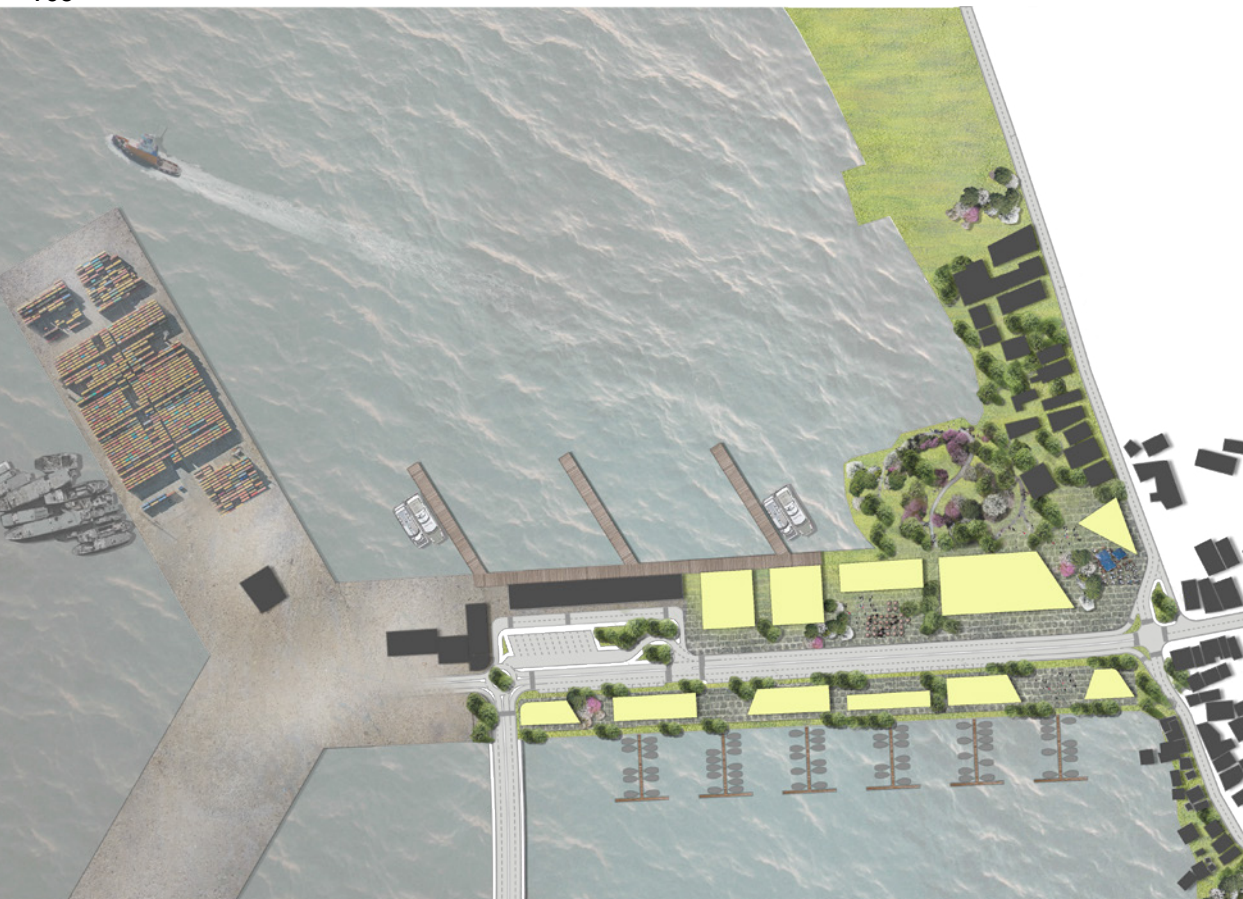
Consists of the actual building of a new bridge between the pier and Panglao Island. The new bridge would be 1km long and should allow for small ships (fishing and leisure boats) to flow beneath its deck. On Panglao side, it would be connected to the circumferential road by a 2x2 road. The meeting intersection is a roundabout to break the speed and thus facilitate the construction of houses nearby. The shoreline should also be transformed into a promenade reducing the development of informal settlements.

On the pier side, the road should be enhanced, as well as the access to the port and the ferry terminal. A roundabout with bypasses allows traffic to flow easily. The ferry terminal needs better access, a drop off zone, and rest areas for jeepneys and buses. This upgraded road connects to Celestino Gallares Street, Maria Clara Street and Graham Avenue at the bottom of the pier. A new intersection has to be designed, as the existing one is extremely confusing and dangerous. This proposal requires the destruction of the corner building between the pier and Graham Avenue, in order to implement a more natural and safer intersection.



STAGE II - 2030

Consists in the conversion of port lands at the first half of the pier into a new development area. The shore line of the pier would be transformed into a promenade, connected to the rest of the shoreline into a grand urban seaside promenade, running towards Dauis Bridge. The rest of the pier would become a business area, where companies, shops or restaurants would be implemented. This zone has a lot of potential as it is very close to the ferry terminal and draws millions of people every year. The development of touristic activities and services like souvenir shops, restaurants and cafés, or even hotels is a feasible possibility. Marine activities would also evolve with the development of a small marina.



STAGE III - 2040

It is uncertain given today's previsions and should be seen as a capacity plan. Indeed, the aim of this last stage is to show the growth of activities in the pier due to the land reclamation on the north side of the shore. Larger scale businesses would be able to settle. The urban space has to be flexible enough to host public manifestation such as markets, concerts, and events. The ancient abandoned seaside could be converted into a park. The marina would be able to grow, and attract rich locals as wells as sailing tourists. On the other hand, the port itself still has room to grow, thanks to the land reclamation its size would be able to double.

This area would become the main gate to Tagbilaran from the sea and air, as a big part of the passengers arriving from Panglao International Airport would be inclined to use the bridge. It has to be a shining showcase of the city and to the province to make the tourists and the investors look not only at the resorts, but also at a full of potential city. This implementation also requires the relocation of many houses. The shoreline should also be transformed into a promenade, once again reducing the development of informal settlements.



III. DAUIS BRIDGE

Dauis Bridge is the more recent of the two existing bridges linking Tagbilaran and Panglao Island, but it was rebuilt over a Spanish bridge built during the colonial era. Nowadays, it is a 2x2 bridge, mostly a causeway that goes from north to south, turning west at the tip of a mangrove area, cutting a bit of the strait off. On site observation and traffic counting revealed that this bridge is used as the old Tagbilaran bridge, in very similar proportions concerning the type of vehicle. In fact, these two bridges act like a great roundabout, traffic going counterclockwise.

As it is much wider than Tagbilaran Bridge, Dauis Bridge seems to be ready to handle an increase of traffic. It is already mostly devoted to heavy vehicle traffic (trucks generate a lot of dust and pollution) and it is very long. Dauis Bridge is a perfect candidate to become a part of the ring road linking Tagbilaran and Dauis. This project is also divided into three stages.

STAGE I - 2020

First of all, a bypass road should be constructed around Dauis, starting where the bridge breaks, crossing the Panglao Island Circumferential Road and reaching the Dauis-Panglao road. The bypass road would be built over an old concrete road crossing the mangrove. Thus, the non-local traffic would not have to go through Dauis, enhancing the livelihood of the city center. The western part of the bridge would see its capacity reduced to a 1x1 road, accompanied by wide sidewalks which would later become part of the urban seaside promenade.

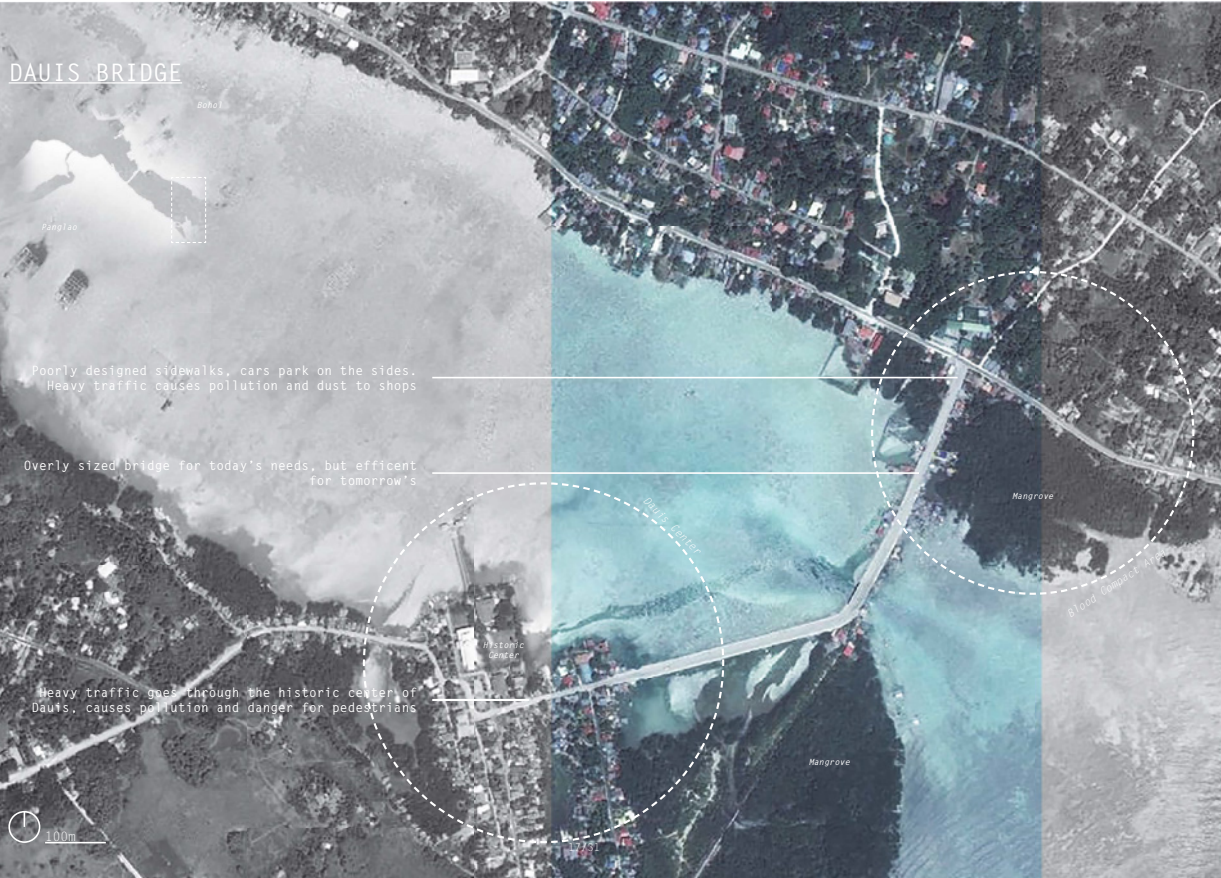
STAGE II - 2030

Consists of the development of the western part of the bridge. Trees could be planted to offer a pleasant promenade, protected against the sun. On the other side, light vernacular structures would host local shops, restaurants, and cafés attracting locals and tourists. This conversion would create a continuous link with the old Spanish church, Dauis Plaza, the main street, and decongest most of the heavy traffic. The lake formed by the causeway can be used for nautical activities or as a fishing port.

STAGE III - 2040

Consists in the further development of these activities on the western part of the bridge.

Dauis town as the potential to become an attractive place integrated with Tagbilaran's urban area. The deviation of the main road from its center can give back a town atmosphere, emphasized by human scale developments.



IV.TAGBILARAN BRIDGE

Today’s most important component of the road network between Bohol and Panglao. It links Tagbilaran’s center directly to the other island. It is a very busy bridge, continuously used by all types of vehicles, the most numerous being motorcycles. This bridge acts as part of a giant roundabout where most of the traffic flows from Tagbilaran to Dauis.

Tagbilaran Bridge is not only a road between two islands it is also a place for meeting, living and business. The first half of the bridge, or causeway, is lined up with houses and shops, built on sticks.

Tagbilaran fish market is situated in the middle on reclaimed land. Every morning, starting at 4am, many fishermen sell their catch while people hustle to get the best prices. This intense activity goes until sunrise while the rest of the city is just waking up. Despite its intensive use, the fish market lacks proper infrastructure, refrigeration system and shade. Some development in this area is needed for further growth.

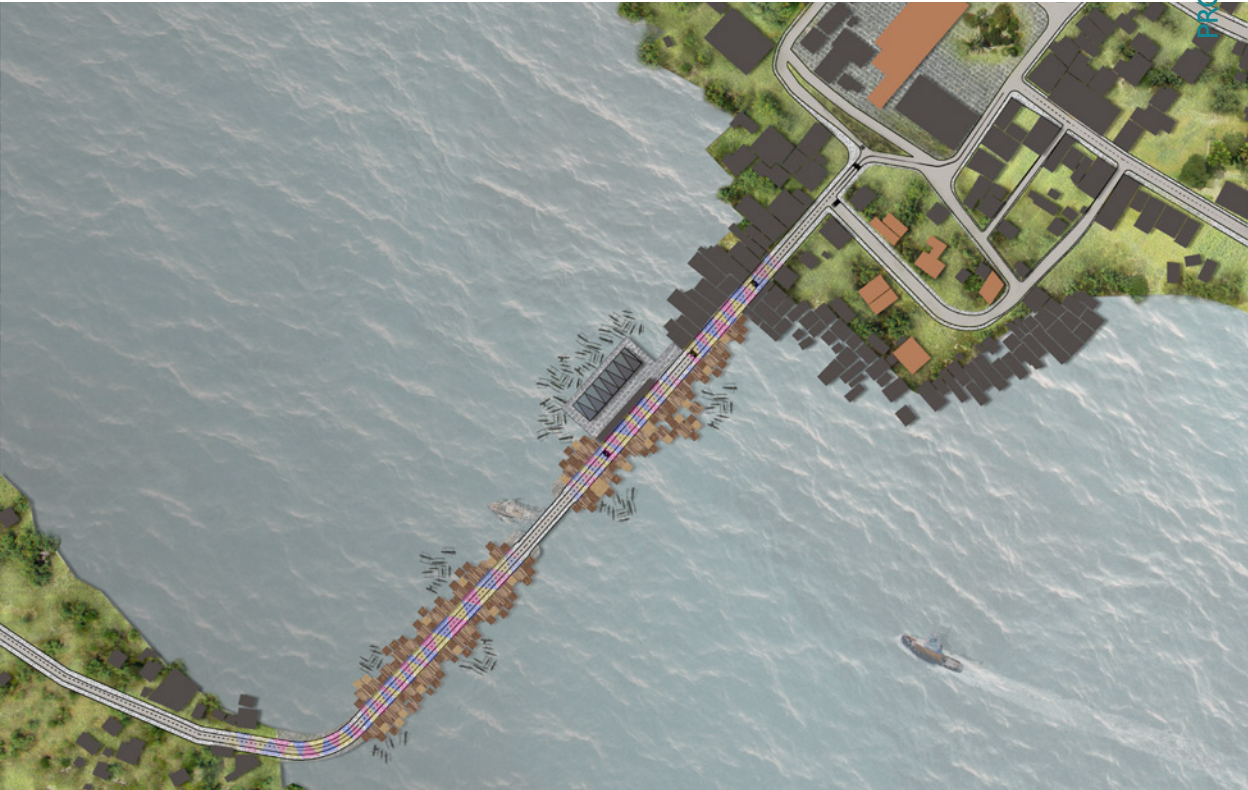
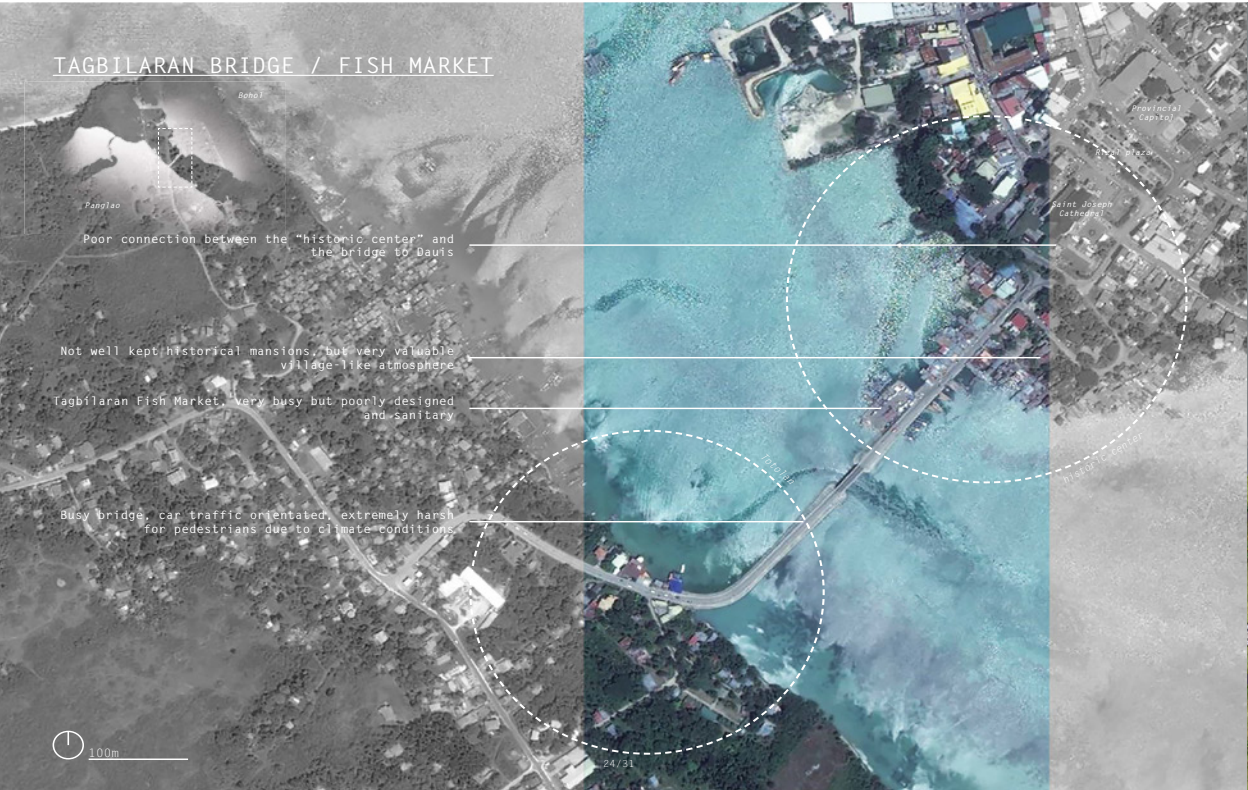
With the construction of the bypass system around Tagbilaran and Dauis, most of the heavy or regional traffic will flow through the new bridge or Dauis Bridge. Only local traffic should be using the old bridge which is a unique chance to make the bridge more pedestrian friendly. Tagbilaran Bridge could become a new kind of public space, an urban promenade linking two shores. This development plan is also set to run until 2040, through three different stages.

STAGE I - 2020

Due to the reduction of traffic the road can be narrowed down in order to give people wider sidewalks. One of the main problems of the bridge is that it offers no shade for pedestrians. Walking on it can be a very tiresome experience when the sun is hitting the concrete road. This is why part of the plan is to create artificial shade with very light structures, using the existing houses’ façades or building poles system made with bamboos. Thus the bridge can become a pleasant place with a promenade leading towards the fish market and enjoying the nice view on the sea without suffering from the sun. The last part of the intervention is to rebuild the fish market into a modern and efficient building up to good sanitary standards. The new building can be treated as a monument that could be seen from the entire Tagbilaran Strait.

STAGE II - 2030

Creation of light modular structures alongside the first half of the bridge to host local shops, cafés or restaurants. These structures would be inspired by the construction techniques of the current informal settlements located nearby. Bamboo will be used to erect them over the water level and create different platforms. Bamboo has many qualities, it is abundant, cheap and easy to use. These light structures can easily be replaced after a typhoon, with minimal costs.



STAGE III - 2040

Consists of the expansion of these light structures towards Panglao Island to respond to popular demand.

The ultimate goal of the Tagbilaran Bridge development is to create a unique linear promenade, starting on Rizal Plaza with the Provincial Capitol, Saint Joseph Cathedral and the bridge going to Panglao Island. This plan also creates a connection with the shoreline promenade project on both sides of the shore. This development will allow people to reclaim their public space and enjoy their relation to the sea. It will also attract many tourists as this project would create a new identity for Tagbilaran.

V. CONCLUSION

Bridging the gap between Bohol and Panglao has two main objectives. First of all, it is a way to answer to future traffic issues linked to the different projects led by the government and natural growth of the population. By creating a bypass road around the soon to be twin cities, the transitory traffic will not have to go through the heart of Tagbilaran, freeing it from future nuisances. The New Bridge and Dauis Bridge will become a part of the ring system, while Tagbilaran will see its use decrease, benefiting the pedestrians.

The second main objective of this proposal is to give a new identity to the area, through the development of the feet of the bridges. By creating innovative urban solutions, the whole area could benefit from a new attractiveness from tourists, investors and residents. This proposal would be eager to be a part of a broader plan for the city of Tagbilaran and the Province of Bohol, to revitalize and modernize the island.



RECLAIMING THE CITY

PLACE-MAKING AND PARTICIPATION FOR A MORE LIVABLE TAGBILARAN

Sophie Regal

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This project take place in the Republic of the Philippines a developing country in Southeast Asia situated in the western Pacific Ocean. Tagbilaran, as the main town in Bohol Island, should be developed as a model city. This project would promote a more inclusive city, ecologically, socially and economically sustainable.

Travelling opens our minds about different cultures. The following proposal reacts to the perceived social gap due to differences in cultural background produced by the city and its inhabitants. The concept is founded on the potential of the spaces and local way of life to generate higher self worth and wealth in existing cultural differences. In this way, 3 pilot projects are proposed for creating a dynamic that enhances the living conditions of public spaces that can truly serve the people.

RIGHT | Sketches of informal sellers by Sophie Regal

LAYOUT

INITIAL IMPRESSION I

SURPRISING FACTS II

Challenge, Approach, Ecosystem Services | IMPROVING LIVABILITY III

One Goal, Pilot Projects | DIFFERENT SOLUTIONS IV

CONCLUSION V



I. INITIAL IMPRESSION

Tagbilaran, on the surface, seems not to have a strong identity since local heritage and customs have been substituted by occidental influence without regarding context. In that sense shopping malls and fast food venues have invaded the city center. Their universal design with huge plain walls and impersonal indoor space, contribute to urban environment degradation and privatization. Moreover, the disappearance of sensible edges between the buildings and the public space hurt the liveability of the centre furthermore revealing social segregation. The centre has been substituted by an indoor “semipublic” space without consideration for those without financial means. This situation creates employment but also increases inequality within the city itself.

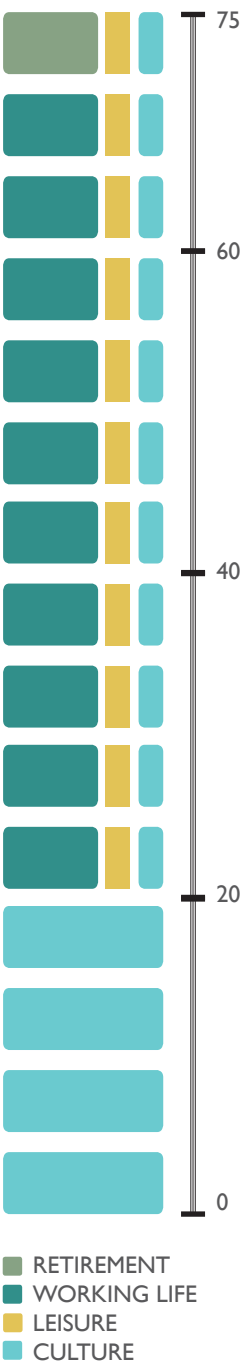
The urban fabric in the city is heterogeneous and quite dense, however, splattered by random empty plots. The city is composed of colonial heritage (such as St Joseph cathedral) recent concrete western style buildings, low cost and old constructions in cheap or local materials. The threshold between public and private space is vague. Indeed the edges are appropriate by essential socially and economically urban practices as food street vendors, retail markets or informal services. Paradoxically recently built buildings do not consider this valuable cultural landmarks and hence do not operate within the boundaries of the public space. Street life should be highlighted as a particular way of life. It is the source of cheap and local products which support a circular economy

II. SURPRISING FACTS

Many people are notably poor, nevertheless they are tremendously creative! With on-site observations it was evident how people morphed objects to create new usages or simply personalize their tricycles or jeepneys bringing colorful characters to the city. In that sense, Tagbilaran is full of informal pieces of art. The most impressive manufactured & beautiful spaces in the city are made by the most income deprived social groups, the informal settlers.

In the other hand, 96% of the population in Tagbilaran is employed by medium and small enterprises, involving formal and informal economies such as sari-sari stores. In that sense the shadow economy, plays an important role in the local development. Informal economies with self employed people are a significant source of income for many households in the city. This innovative potential of the informal activities create opportunities for poverty reduction and economic growth.

LIFE PATTERN IN TAGBILARAN



III. IMPROVING LIVABILITY

CHALLENGE

Downtown Tagbilaran is an area which seizes down to a human scale. Nevertheless, it presents a lack of public spaces and non-appropriate design for people. This restricts the possibilities for standing or sitting while the downtown possesses some rather quiet areas. In that way, the city presents enough potential for enhancing the livability of open spaces because the site displays a provision of land with great perspectives. On the other hand, due to an increase in traffic Tagbilaran follows a development agenda that prioritizes the streets, neglecting pedestrians. Indeed, sidewalks have already been reduced to adapt to vehicle flow. Urban development decreases the livability of the spaces when traffic circulation hinders the possibilities of hearing and talking. How can we improve the livability of downtown Tagbilaran to preserve they local specific street life?

APPROACH INSPIRED BY PLACEMAKING

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Placemaking is a bottom up approach resulting from people taking ownership of the space and where design serves function. Stakeholders should reflect diversity, from different socio-economic backgrounds, ages and abilities. It is not only about access and enjoyment of the place; it also plays a key role in defining identity, creating public art and overall maintenance of the public space. To be successful, this process requires great placemaking leadership and action on all levels.

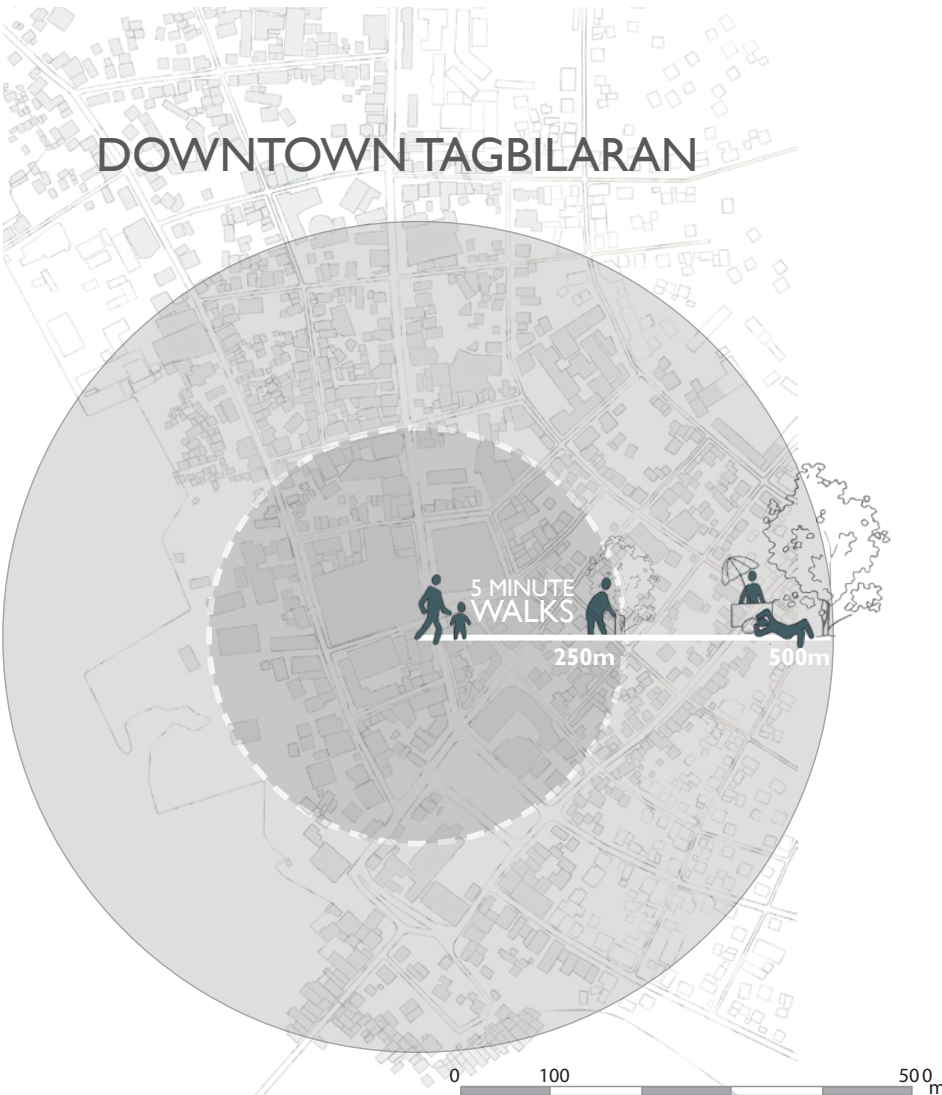
The proposal, promotes a sensitive approach and documentation to understand urban dwellers. The study of human beings inside the city allows us to discover what works best in a particular context. Great public space can improve the quality of life of individuals and communities everywhere. Indeed it could benefit stakeholders in diverse ways, allowing social contact, offering economic opportunity or influencing the physical and emotional health of the users.

The pilot projects would engage people in ways that traditional planning processes do not. They provide space for participation and experimentation as collaboration with artists. It should lead to develop and diversify land uses. Users should look at the space in another way to enhance cultural value and keep people proud of their ownership and culture. These projects help stakeholders to bring immense changes to their places.

ECOSYSTEM SERVICES

This work promotes a sustainable urban landscape development as a way to improve the environmental experience considering more than aesthetics. Upgrading the urban environment contributes to the user's wellbeing with cultural and recreational benefits. Also, vegetable gardens can strengthen the community bonding through the production of food.

Indeed green and blue infrastructures can benefit urban dwellers to improve their comfort in relation to the tropical climate heat, limit air pollution and manage rainwater.



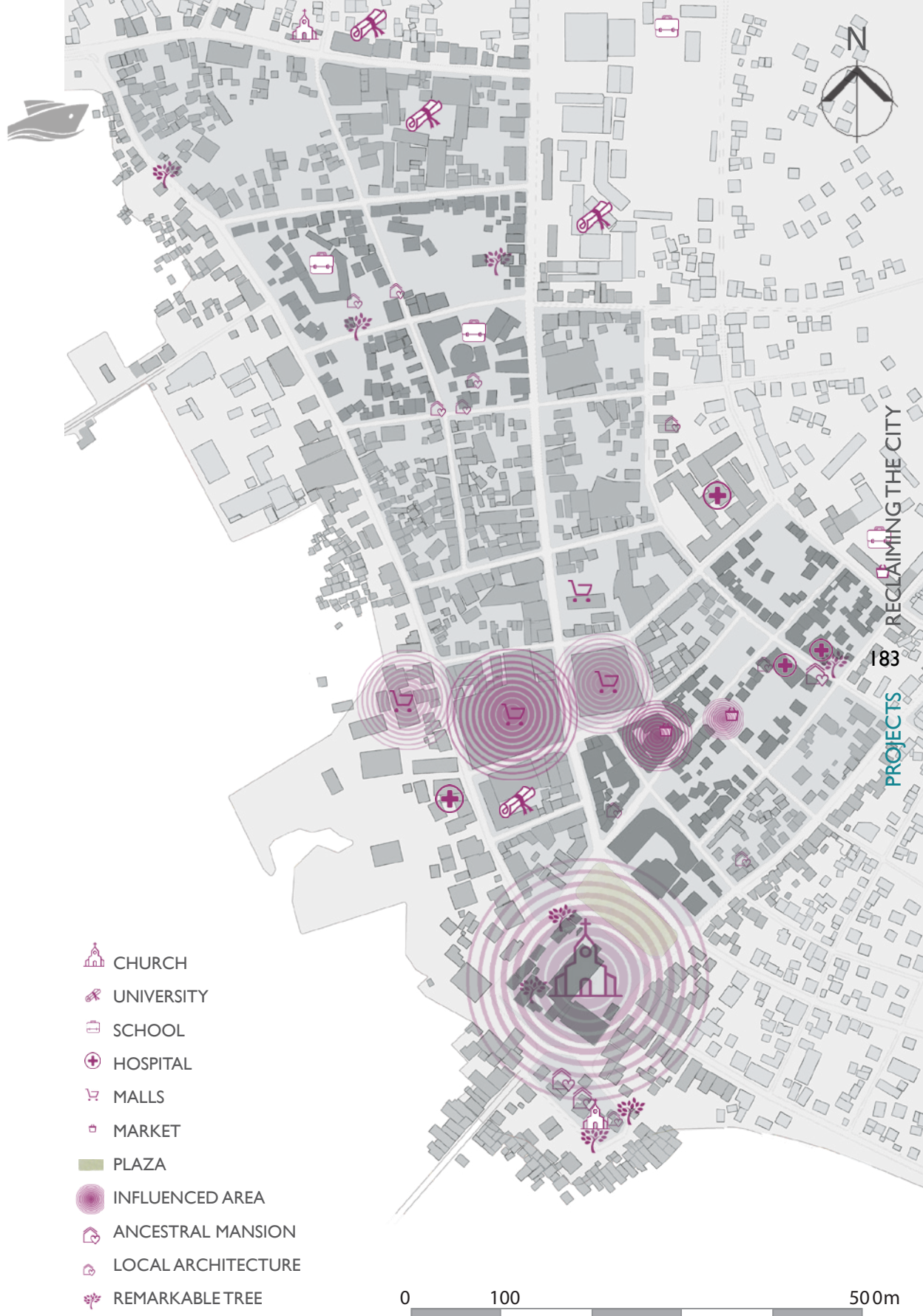
IV. DIFFERENT SOLUTIONS

ONE GOAL

This proposal would creates alternative streets as public spaces for people. It pays particular attention on the economy of the edges that are essential for a livable Tagbilaran. Enhancing the qualities of open spaces should boost the circular economy for users as informal sellers, customers and pedestrians. Furthermore, detailing the public spaces allows to recognize potential spots to implement 3 pilot projects that vary according to the context of the different streets.

These concepts are based on existing infrastructures and propose solutions to improve the public space in an affordable way. To be successful, this process requires action on all levels. Therefore, stakeholder meetings and key actors in the local community are instrumental to reach a suitable and sustainable improvement. The local governing authorities should support the project to create an enabling environment which engages the urban dwellers, including participatory opportunities. Reclaiming the city considers inhabitants physically and ethically to contribute, expand and continue urban development.

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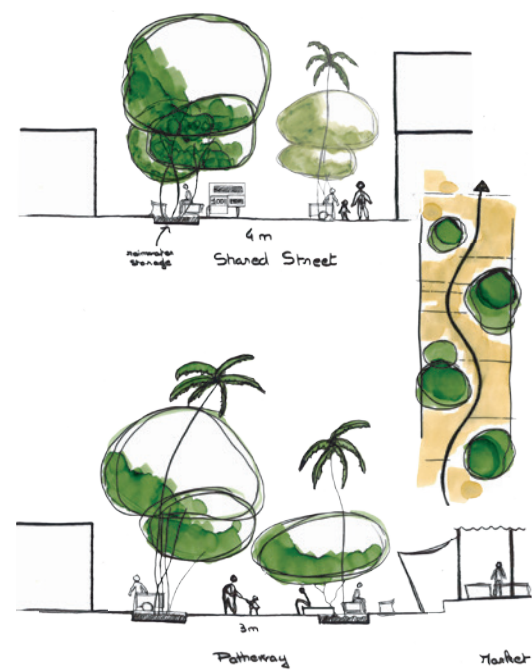
#1 - J.S.TORRALBA STREET

This project runs from the spiritual center downtown (St Joseph cathedral) to the residential area by Torralba Street in order to get out from the heavy traffic. This road is a seam inside the urban fabric, linking the shopping district and the incongruous city block. The site is still under the influence of the commercial area and close to public transportation nodes. Thus, this public space brings people together without segregating groups.

This street should be designed to create inviting spaces for pedestrians, formal and informal businesses. The cost of this pilot project should be significantly assumed by the authorities as an urban renewal program for street infrastructures.

To increase the livability, the concept is to create a gradual change from the main road to local streets. The first part is a standard road providing parking and sidewalk spaces. The following portion is a shared street where pedestrians circulate freely among vehicles. Finally, the last part becomes a pathway where pedestrians have priority even if tricycles and motorcycles have the ability to circulate. The street charms with the vitality achieved by a canopy of leaves. Indeed, the landscaped hole by the side of the road serves for rainwater catchment which enables trees to grow and provide shade.

This design allows for the diversification of the market and its expansion optimizing the innovative potential of the informal activities. This specific cultural experience is addressed for residents but could even attract tourism.



...from main road to local street...

...towards and inclusive economy...



ISSUES

- PUBLIC SPACE
- ECOSYSTEM SERVICES
- INFORMAL ECONOMY
- TOURISM

#2 - JACINTO BORJA STREET

The site is installed in a strategic location and made a link between the main avenue Carlos Perez Garcia (CPG) and Celestino Gallares. Consequently, the street Jacinto Borja is surrounded by public services, universities and the central elementary school of Tagbilaran. This street is remarkable for its irregularities. Indeed the constructions do not all align with the boundaries of the road. In this way, the site has great potentials for the expansion of public spaces. Moreover, it possesses large open plots of gardens with majestic trees seemingly attached to old properties.

The proposal is to build partially on the open green plots in order to cover the full cost of the proposition. It should include governing authorities and consider neighborhood implications through a barangay council. Once distant from the road, the construction will allow to distinguish communal spaces surrounded by buildings and public pocket gardens linked to the road.

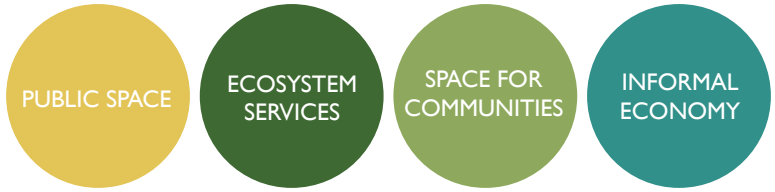
The pocket gardens' calm atmosphere provides possibilities for standing and sitting as well as hearing and talking. Protection against unpleasant climate is provided by ancestral trees and plantations. The option of endemic species should be encouraged to promote the heritage and preservation of the location. This square sets improved standards of living, is welcoming of informal activities and can also transform into a stage for performances and storytelling.

On the other hand the green plots surrounded by buildings should reclaim the livelihood of existing communities. Access to this resource should be used for subsistence. It will engage the communities in environmental issues and encourage them to take care of their space. The collective action will implement green informal livelihood strategies. The concept is to promote urban farming as a way of landscape appropriation creating strength for proud and long lasting communities. Moreover, this agriculture generates a small but significant income for families less responsive to markets.



..Look at the space in a different way...what if the student was at the heart of the project? Street art would make people more aware of their urban fabric...

ISSUES



#3 - REMOLADOR STREET

In the North part of downtown, between the main avenue CPG and Celestino Gallares, the street Remolador acts as a parenthesis to avoid the traffic flow from North to South. The site is surrounded by universities and can become a recreational area for students and other social groups

This street should be reclaimed by students to become a hotspot for spontaneous activities. The cooling shadows from trees localized on the boundaries of private properties could promptly become appropriated as a place of gathering, and then, attract more sellers. The students could contribute effectively in the sustainable transformation of the space. On the one hand, student contests could be organized to provide urban furniture, followed by other events and ideas to improve the space. Moreover, diverse art will happen as street art is used to make people aware of their urban fabric. It should work as a game, nevertheless, traces and marks at the beginning of the street should explain the rules of the game to invite people to play and participate.

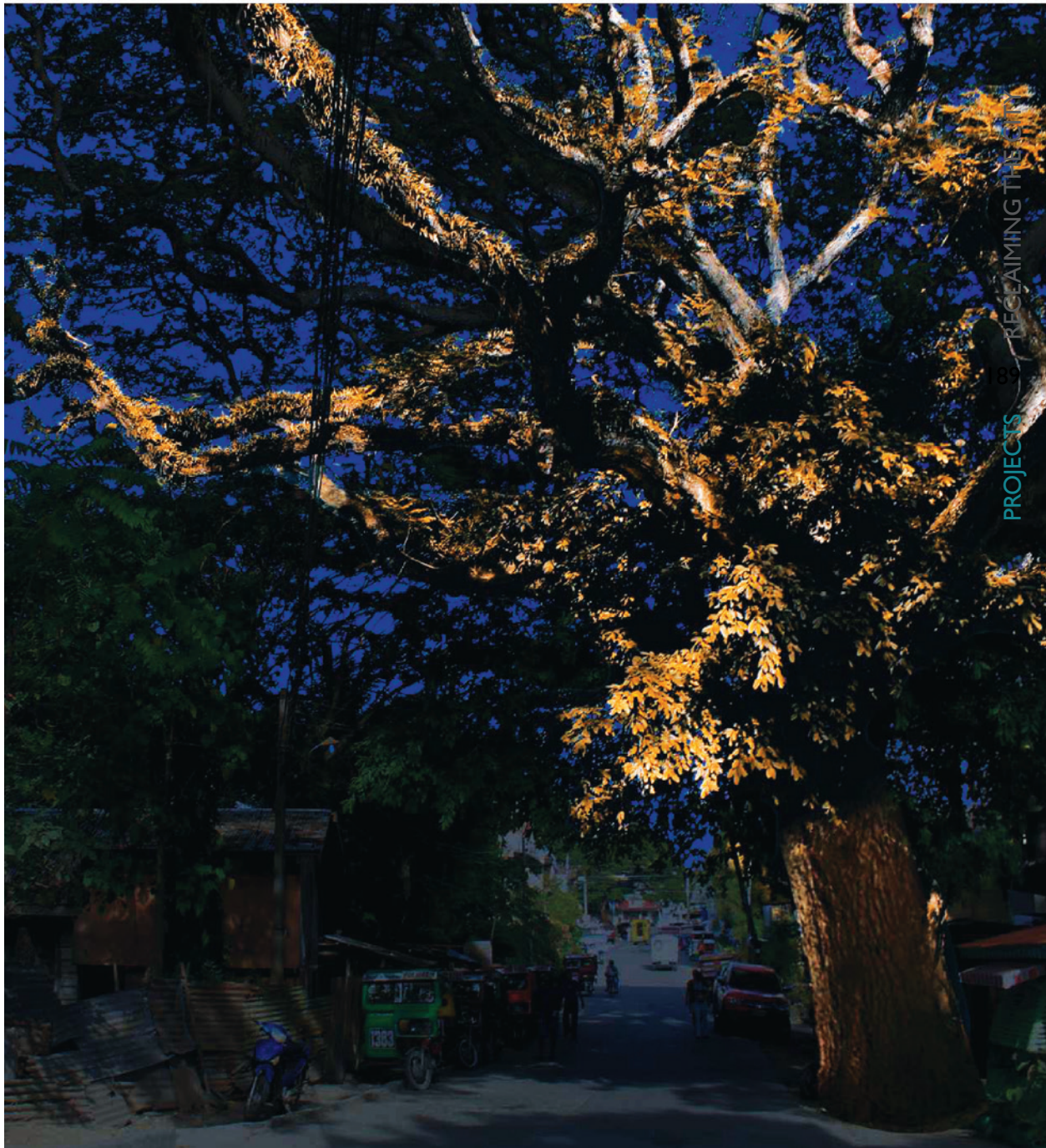
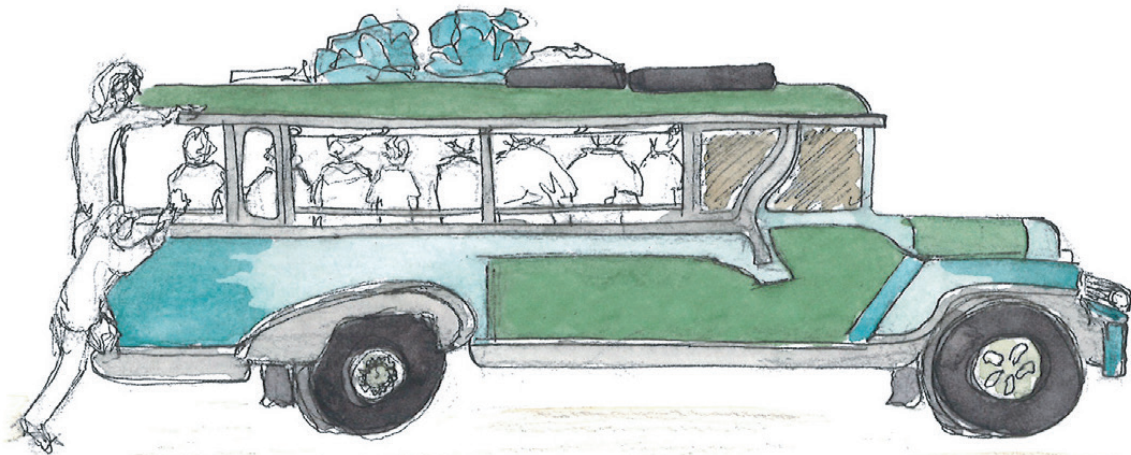
This proposal leads to the “Re:Design” of the urban fabric and permits user appropriation without significant cost from the authorities. Indeed they should support the project but placemakers could be sponsored by the universities and student organizations as landowners.

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...Urban creativity and dweller engagement to generate self-esteem and wealth in cultural difference...



...Each pilot project could be a hub of qualitative public space that contributes to upgrading living conditions for people's well being...



V. CONCLUSION

This project is an answer to resolve the challenge of sustainable development by focusing on urban dwellers in downtown Tagbilaran. In that sense, rebuilding the natural capital is a source of public benefit, environmental and economic growth. This proposal is meant to open a discussion amongst the governing groups and the inhabitants' ability to contribute in the best interest from both parts.

These pilot projects, based on different contexts, answer to diverse problematics. They deliver information for stakeholders in order to generate urban creativity and user engagement. These proposals, bring people together, and highlight the local way of living in order to generate self esteem and wealth in cultural difference. In that sense, they strengthen and support the performance of informal economies which offer opportunities for poverty reduction.

At the final stage, each pilot project could be a hub of qualitative public space that contributes to upgrade living conditions for people's well being. These pilot projects will affect the quality and livelihoods of nearby residents, as such, their involvement is instrumental to create an urban dynamic for a more livable Tagbilaran.

Finally, this proposal could be a useful foundation to make it "real" or inspire Tagbilaran barangays and authorities. It could also be extended in similar cases for affordable public spaces for deprived urban communities, NGOs and governments.

LEFT & RIGHT | Sketch of main street & Promotional poster for placemaking initiatives by Sophie Regal



RE:DESIGN Your URBAN PROPERTY Student Design Competition

DUE !
16 June 2016



PRICE : 1# 2000 PHP 2# 1000 PHP 3# 500 PHP

ACTIVATING POTENTIAL IN DOWNTOWN TAGBILARAN

FROM CAR FRIENDLY TO PEDESTRIAN FRIENDLY

Fabio Latino

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This project is the result of on-site observations, interviews and analyses of findings taken place in Tagbilaran City. The investigation focused not only on the physical qualities of the site, but also looked at the use of the urban environment and human behavior. Due to climatic and cultural reasons inhabitants of the city spend most of their time indoors, neglecting outdoor space, which ends up being just a transitory and highly congested environment.

The aim of the project is to enhance pedestrian experience within the city centre, building on existing habits and socio-economical activities. Urban design and planning is therefore used to activate potential and provide opportunity for development.

RIGHT | Sketch of proposed public space by Fabio Latino

LAYOUT

CONTEXT, CULTURE AND DEMOGRAPHICS I

THE PUBLIC AND ITS SPACE IN TAGBILARAN CITY II

Analysis of the Center, Opportunities | URBAN ISSUES ADDRESSED III



I. CONTEXT, CULTURE AND DEMOGRAPHICS

Tagbilaran is a city of the island province of Bohol, Philippines. For its size it represents the first city and capital of the island, with a population of about 96,722 (Census, 2010). Natives of the island are called Boholanos and their history has been shaped by several foreign occupations since early 1565, when Spain made its first contact with the island. Later on, United States (1899) and Japan (1942) occupied the territory until 1945 when the island was liberated and Japanese Imperial forces were defeated.

Influences of the past are still visible nowadays as the predominantly practiced religion is Roman Catholicism. In addition to this English and Spanish languages are widely spoken and understood. The province is part of the wider Visayan ethno linguistic group, the largest in the Philippines; the native language of the island is Boholano, which is a dialect of Cebuano, official language of Bohol and Visayan speech variety. Tagbilaran City, and Bohol in general, does not present remarkable multiculturalism and the Boholano culture is very similar to the culture of the Philippines. Much of the immigration and cultural exchange happened during colonization times. Besides records of contacts with Spain and trades with Mexico, the culture also shows influences from China and other Asian countries.

Information collected during field work and site visits revealed that the province has been experiencing immigration from closer towns and neighboring regions, as it is also reflected in the population growth since 1990. Immigration occurs predominantly for economic reasons as the number of job offers in Tagbilaran is greater than in the rest of Bohol. Higher education is also a reason why people move to the city. These two trends supported the addition of a demographic that is likely to be over 18 years of age, without big economic power or attachment to the city. Examples of these cases have been found in the informal settlements, where people end up living also because of the lack of affordable solutions inside the city. Tagbilaran does not present much multiculturalism, however it shows signs of segregation between social groups and areas within the urban fabric. On-site observations and interviews revealed problematics such as widespread privatization, mallng, little right to the city and domestication of space. Also, despite its modest size and monoculture, respondents referred to the city as unsafe, especially at night, when no one advised to walk around alone. These findings were quite relevant to the formulation of this proposal since they revealed issues that could be addressed through urban design and planning.



DIALOGUE WITH THE STREET MAIN STREET



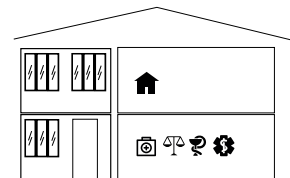
OPENING HOURS 09:00 - 24:00

SERVICES
GOODS



OPENING HOURS 09:00 - 19:00

RESIDENTIAL
SERVICES



II. THE PUBLIC AND ITS SPACE IN TAGBILARAN CITY

Tagbilaran suffers from an unplanned and fast urbanization where public participation and citizen inclusion in decision-making is not taken into account by local authorities. This influences negatively the degree of interest and sense of ownership of the inhabitants towards public spaces. These are also scarce, as most of the space is privately owned and somehow programmed. Due to climatic circumstances inhabitants do not spend much time outdoors; public space and streets are neglected, turning into transitory and highly congested environments. Filipinos prefer spending time indoors, preferred places being shopping malls. Malling is a very evident phenomenon in the city; the shopping centre becomes an indoor public space for many groups during the day. Through interviews and observations, it resulted that almost everybody went to the mall even without the intention of purchasing. The shopping centre becomes a meeting point, away from the congested urban landscape and the hot climate, a place to find entertainment, to see and be seen (Galanakis, 2013).

The lack of interest in the outdoors and the traffic driven urban design feed each other in a perpetual loop. The city is not pedestrian friendly as it is the result of fast urbanization which favors vehicles. Also, it does not provide much shade from the strong sun or pavements suitable for pedestrian circulation. During the day outdoor space felt as a transitory space more than a place to spend time in, a no-place. The available public space is used mostly during the evening when the temperature goes down and the traffic diminishes. However, during night hours people do not go out much because they fear delinquency. In this regard safety is a concern according to people interviewed.

The main official outdoor public space in the city is the main square, Plaza Rizal, in Sitio Ubos (Lower Town) being part of a historical complex comprehensive of St. Joseph the Worker Cathedral. The square is very formal in its design; it is rectangular in shape with paved centre and a perimeter of what once was a landscaped garden and fence to divide it from the street. Along the paved area there are long and slim trees and benches as intervals between one tree and the next one. In the centre there is a monument to a national hero, a raised orchestra gazebo on one side and a fountain on the other. It feels like the square follows the idea of what a public space “should be” rather than responding to local needs and customs. The design feels indeed imposed. Many elements suggest that the design ‘does not follow function’ or urban life anymore, or never had. The design and choices of vegetation does not suit the climate since the square lacks in shade which would make it more popular during the day; the trees are in fact too slim to provide any of significant relevance. The fountain is not in function to save on expenses, according to the municipality, which is a pity since it would refresh the air and provide an attractive feature. Efficient waste collection is lacking, which makes the place untidy and unpleasant.

Although the municipality does not invest much in it, inhabitants show interest on the place during the early evening; students, couples and families make use of the space to hang out and meet up. Benches seem to provide privacy and views onto the square more than support conversation. These involuntary compartments are for this reason taken over by informal vendors who provide services like massages or beauty treatments. Everything happens there, private and public spaces are blurred together. The vendors act as tenants of the space while in fact they don’t have any formal right to do so. The square is an example of how appropriation of space works in the city, and a source of inspiration for this proposal. On the paved area there are some scattered empty market stalls also, where a small food market takes place during the week. The remaining space is contested between youngsters rehearsing choreographies and children feeding the pigeons with pop-corn, sold on the site.



These facts show how the space has potential to be developed but also the mutual understanding of each other's needs by the users involved. The square is an example of dialogue between diverse demographics that successfully make use of the space. What is noticeable is that people interact with whom they are familiar with, then one questions the exchange with people from diverse, or mixed, groups.

Another semi-public space used by most of the community is the church. Service runs a few times per day during most of the week and especially Sundays are very popular. Both inhabitants from informal settlements and the city said they attend on a regular basis. Are churches then a place for social mixing? Religion in Tagbilaran is certainly a shared ground that many groups have in common. There was an impression left however that attending the same event would not be enough for groups to establish a dialogue. Even when sharing the same physical space, attending a function remains an individual experience.

As said previously, although multiculturalism is not relevant in this case, multiple identities and diverse economic groups are present. As learned from the reading by Galanakis people do connect between groups sharing activities and interests they have in common (2013). Tagbilaran does not provide enough room for this to happen. This is partly because inhabitants are not included in the making of the city and seen mostly as users or consumers. Inhabitants are not able to program the sidewalks for instance because the narrow design does not provide such opportunities. Social inactivity and spontaneity supports the existing fragmentation, social isolation and detachment from the environment one lives in. The square and the streets represent big potential for change to happen. Reconnecting the urban space to urban life and make it relevant to the people who want to participate is a first important step to take.

DIALOGUE WITH THE STREET
SECONDARY STREET



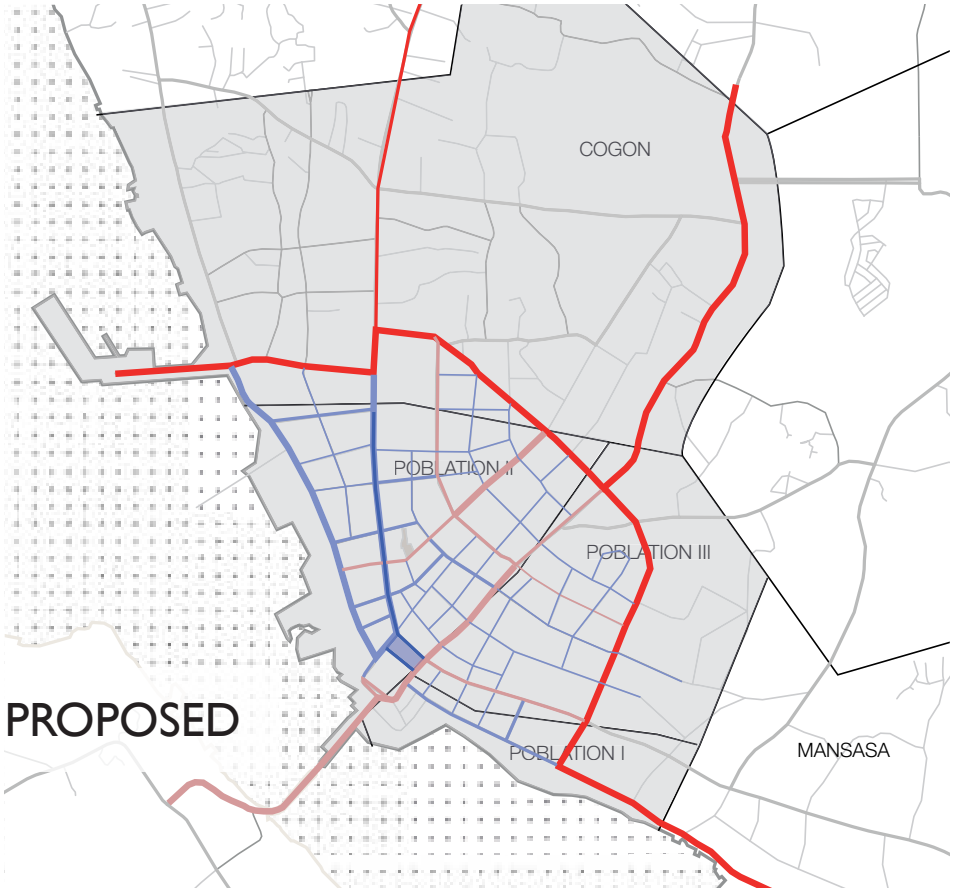
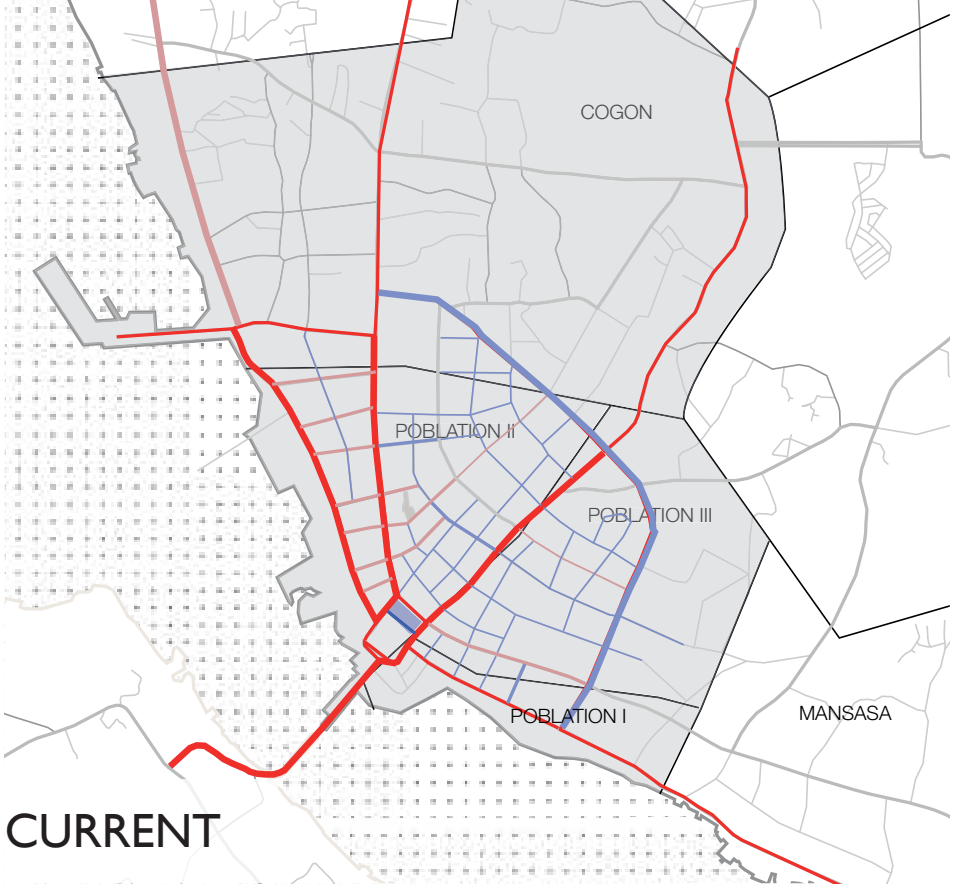
III. URBAN ISSUES ADDRESSED

As aforementioned, Tagbilaran represents a significant node in Bohol Island. Geographically it is situated between important points of interest such as Tubigon (another major sea port) Loboc and Panglao, two renowned touristic destinations. The traffic that is present every day, causes congestion and pollutes the air is another significant issue that discourages pedestrian life on the streets. It has been fundamental to understand the role of traffic in order to address the creation of livelier streets. It is interesting to notice how traffic influences activity around it. In this proposal, traffic is used as tool to encourage businesses to move to different locations and to trigger targeted urban developments in designated areas. Since “public spaces” are indoors and streets are designed for vehicles mainly, roads are congested and their only function is to connect buildings and point of interests. The city centre is in fact populated by unexpected businesses such as, cement shops and hardware dealers which are very common, probably due to the ease of access to the place with big vehicles suitable for the transportation of this kind of materials.

The current congestion sits along two national roads, Carlos Perez Garcia (CPG) Avenue and Celestino Gallares Street. The traffic is mostly directed towards Panglao Island; at the moment the airport and peer also feed the flow of vehicles. The finding of another bridge close by could then represent an alternative option to create some pedestrian ground and help ease the congestion. The idea supporting the project is to deviate the traffic from these central roads to a provincial road that connects the peers to a second bridge. This road is suitable because is far enough from the historical centre but at the same time is well linked. Also, it allows expansion and redevelopment since the area surrounding has very low density. Traffic would be deviated through street regimentation paired up with intelligent and effective design strategies that would reduce the carriage and number of lanes. Design will have a fundamental role in creating streets that are unattractive for vehicles.

- MAIN ROADS (HEAVY TRAFFIC)
- SECONDARY ROADS (LIGHT TRAFFIC)
- MAIN STREETS (MIXED USE)
- SECONDARY STREETS

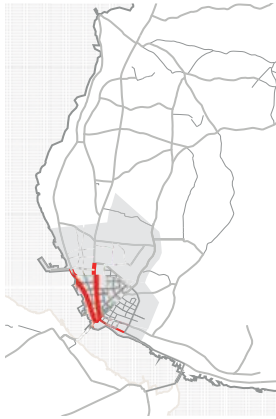
ANALYSIS OF THE CITY CENTER
TRAFFIC IN THE BIGGER PICTURE



ANALYSIS OF THE CITY CENTER

MAPPING

SERVICES AND POINTS OF INTEREST IN 20 YEARS

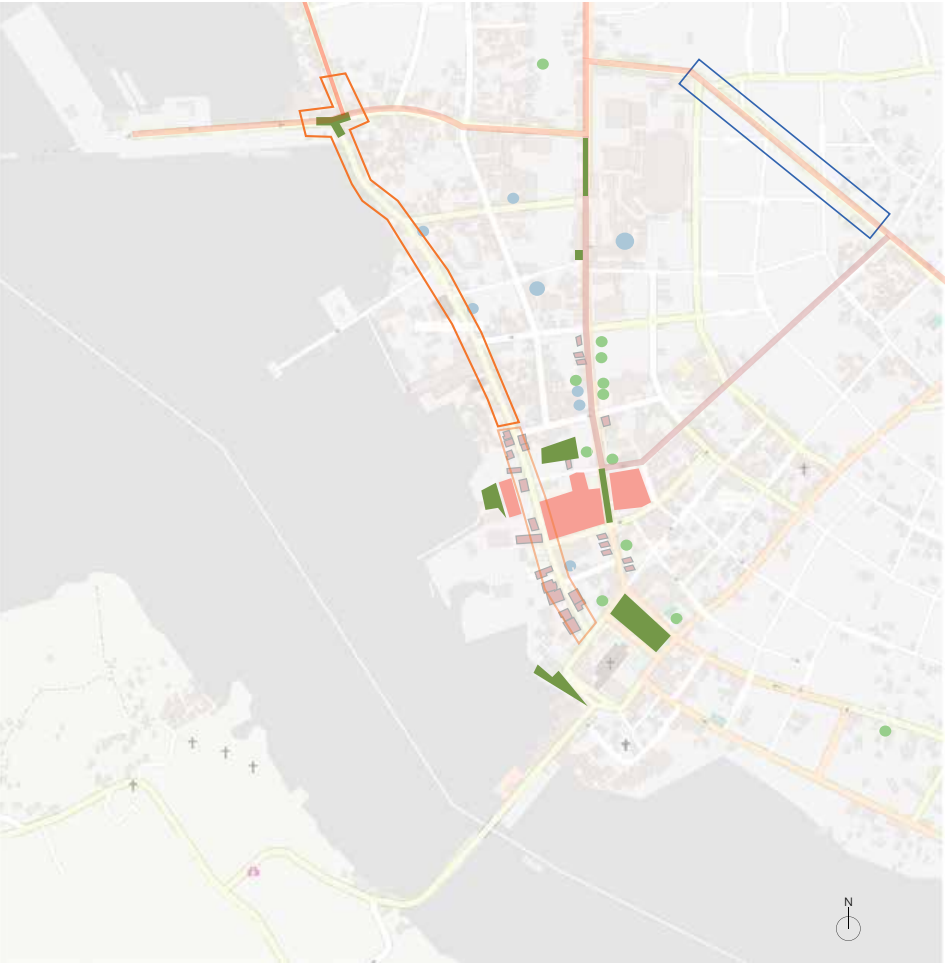
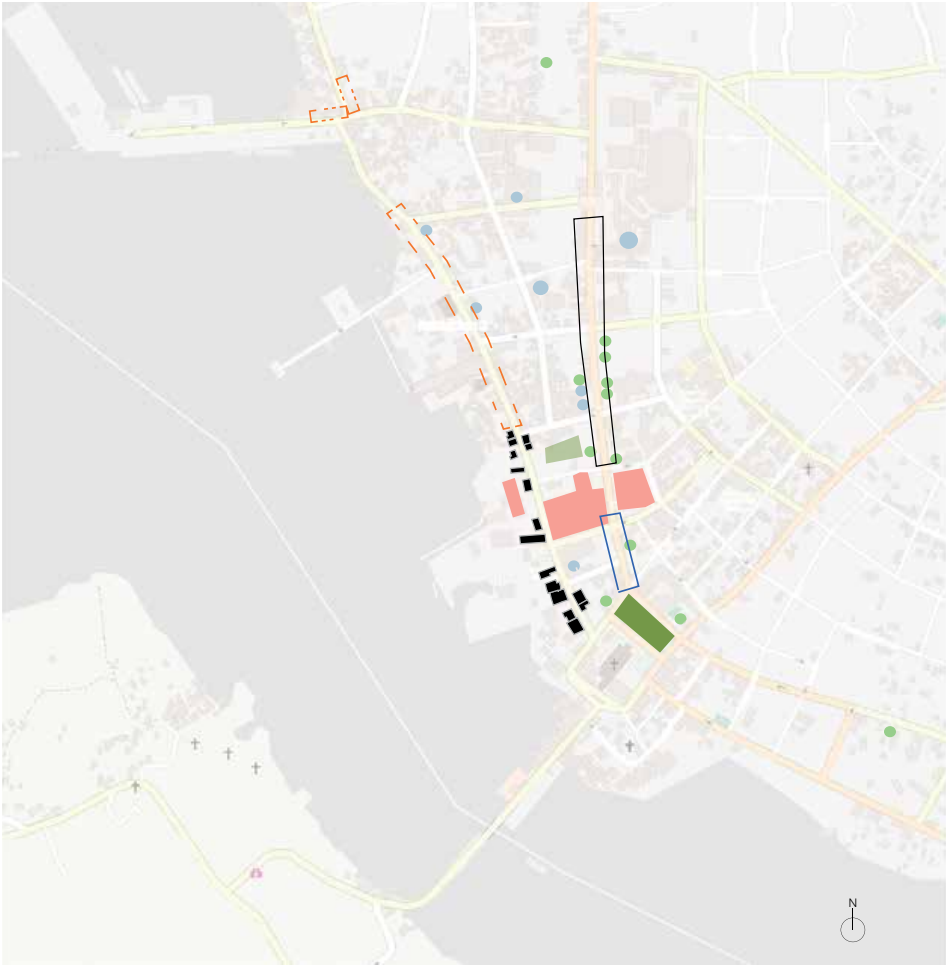


2016 | SCALE 1:10,000

- PUBLIC SPACE
- MALL
- HARDWARE
- STREET FOOD
- SERVICES ON THE GROUND FLOOR
- EDUCATION
- BANKS
- HOSPITALITY
- BUSINESS ON THE GROUND FLOOR



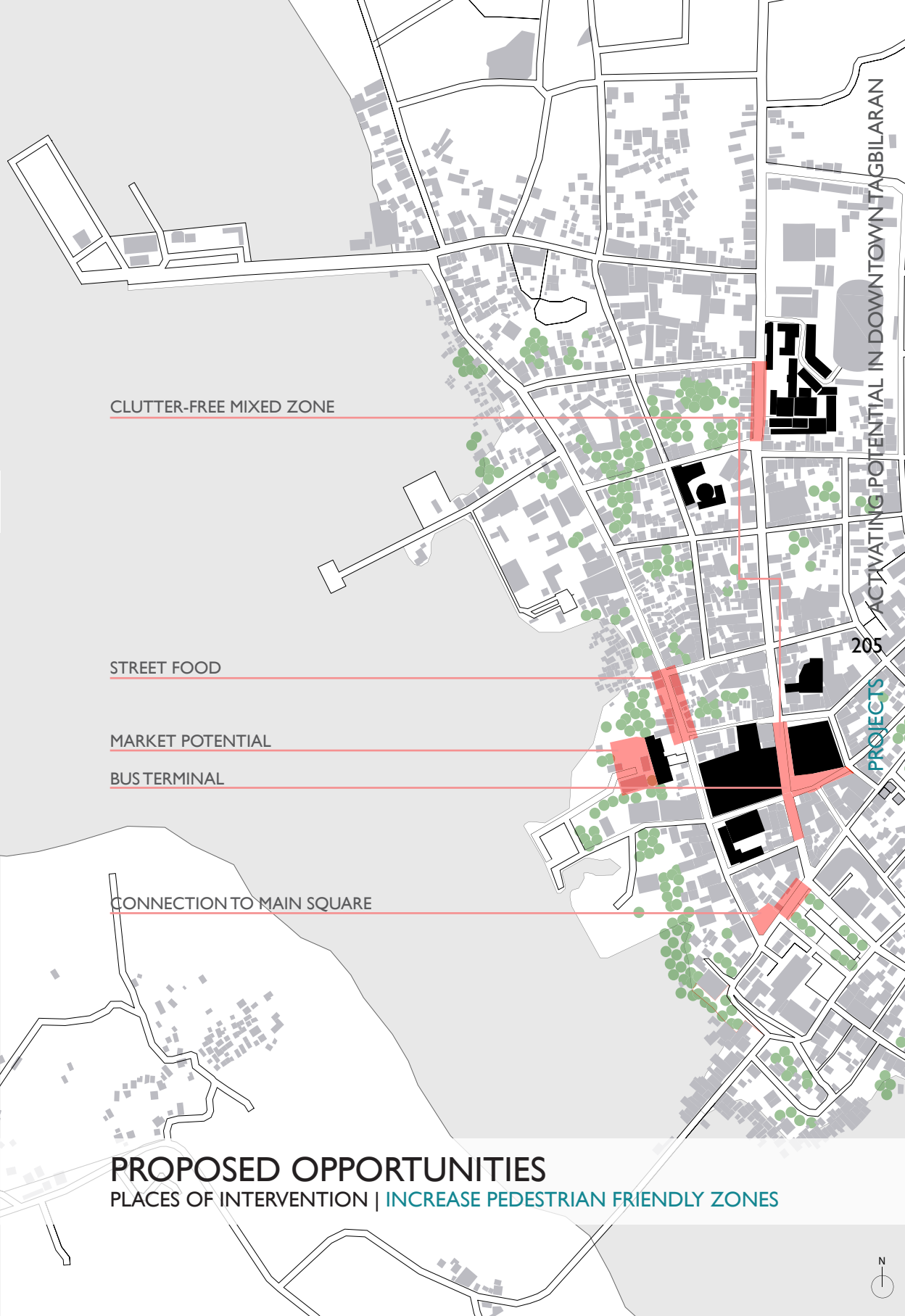
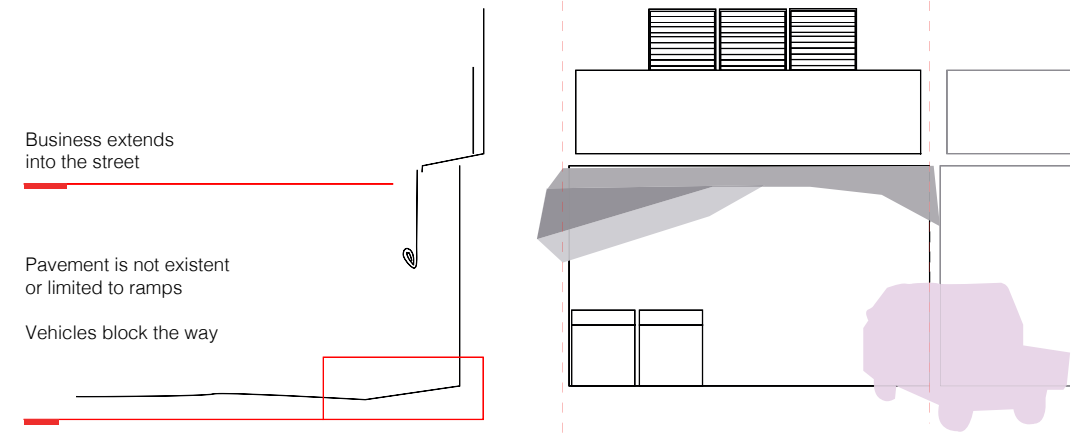
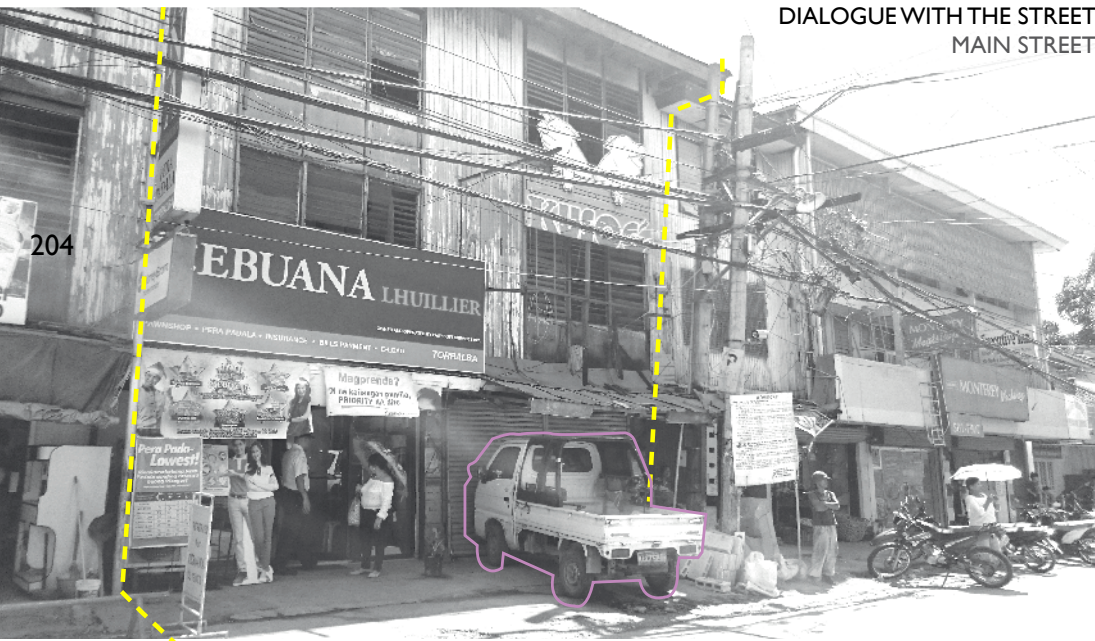
2036 | SCALE 1:10,000



ANALYSIS OF THE CITY CENTRE

INFORMAL USE OF SPACE

As visible from the map, the shift of the traffic will carry the unwanted businesses to another location opening space for suitable development. Another aspect that does not help pedestrian friendly streets is the presence of inactive, or unengaging, businesses at the street level. In the map, “black businesses” are those that do not provide any interaction with the passers-by, as they don’t sell goods but provide services like insurances, or medical treatments. This is not a problem, although the limited opening time means that these streets are not attractive when the temperature is cool enough to walk around, resulting in inactive streets. The potential of this could be aided restructuring the location of certain businesses, providing regulations.



PROPOSED OPPORTUNITIES

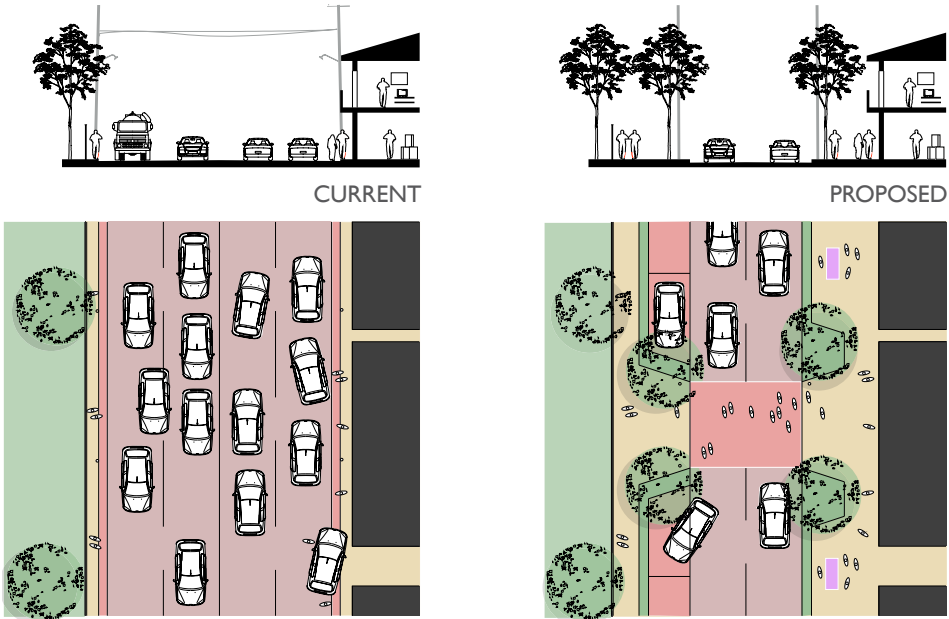
It is necessary to stress the importance of creating a network between interesting points within the city to allow pedestrian flow. The in-between space between buildings is at the moment neglected, while it presents great potential for pedestrian life. Traffic is discouraged and reduced by urban design that makes driving complicated and not efficient. Widening walkways will then allow for greater pedestrian flow. For this to function, pedestrians need to feel good about walking distances in such climatic conditions. Green infrastructure will enhance the aspect of the streets, while cooling the environment and providing shade. In this scenario, people would not need to wait until the evening to enjoy the outdoors.

This image shows one of the selected areas to develop to give an idea of what could happen. Since the traffic has been pushed to another road, lanes have been halved in number; this discourages drivers even more given the reduced visibility. Enlarging the pavement also will make pedestrian life much safer; the same pavement will have space for informal economic activity to happen, as it does now in the main square of Tagbilaran. The idea is to provide life for most of the day, for this reason also green infrastructure is put in place for a cooler environment.

The development is thought to happen in the long term. Ideally several parts of the city would join into the regeneration and would automatically connect by a pedestrian network that would generate revenue for businesses, attraction for visitors and development of opportunities for new activity. As mentioned before public participation will be needed also to maintain the infrastructures. Inhabitants will need to understand and value the new way of living the street. If collaboration takes place between the public sector, private investors and the general public, a smooth transition is more than possible. Horizontal conversations between stakeholders would also reduce the risk of some parties being excluded from the strategic plan.

RIGHT | Sketch of proposed public space by Fabio Latino

PLACES OF INTERVENTION
BISU



PLAZA RIZAL OF TAGBILARAN

Lotta Nylund

Tagbilaran has very limited public space. In addition to the streets, Plaza Rizal is the only main public space in the city center. The second one is President Carlos P. Garcia Park 2.5km away. This park is spacious but it is not in extensive use since it is in the outer parts of the city.

Tagbilaran's pedestrians are mostly students, who tend to have low financial means and are short distance walkers. Due to growing traffic, car lanes have been widened at the expense of the sidewalk space. Some streets have sidewalks, but they differ a lot in width and elevation. This might be a reason why the elderly are not seen on the streets. Furthermore there are no benches to rest on and crossing the road is not easy.

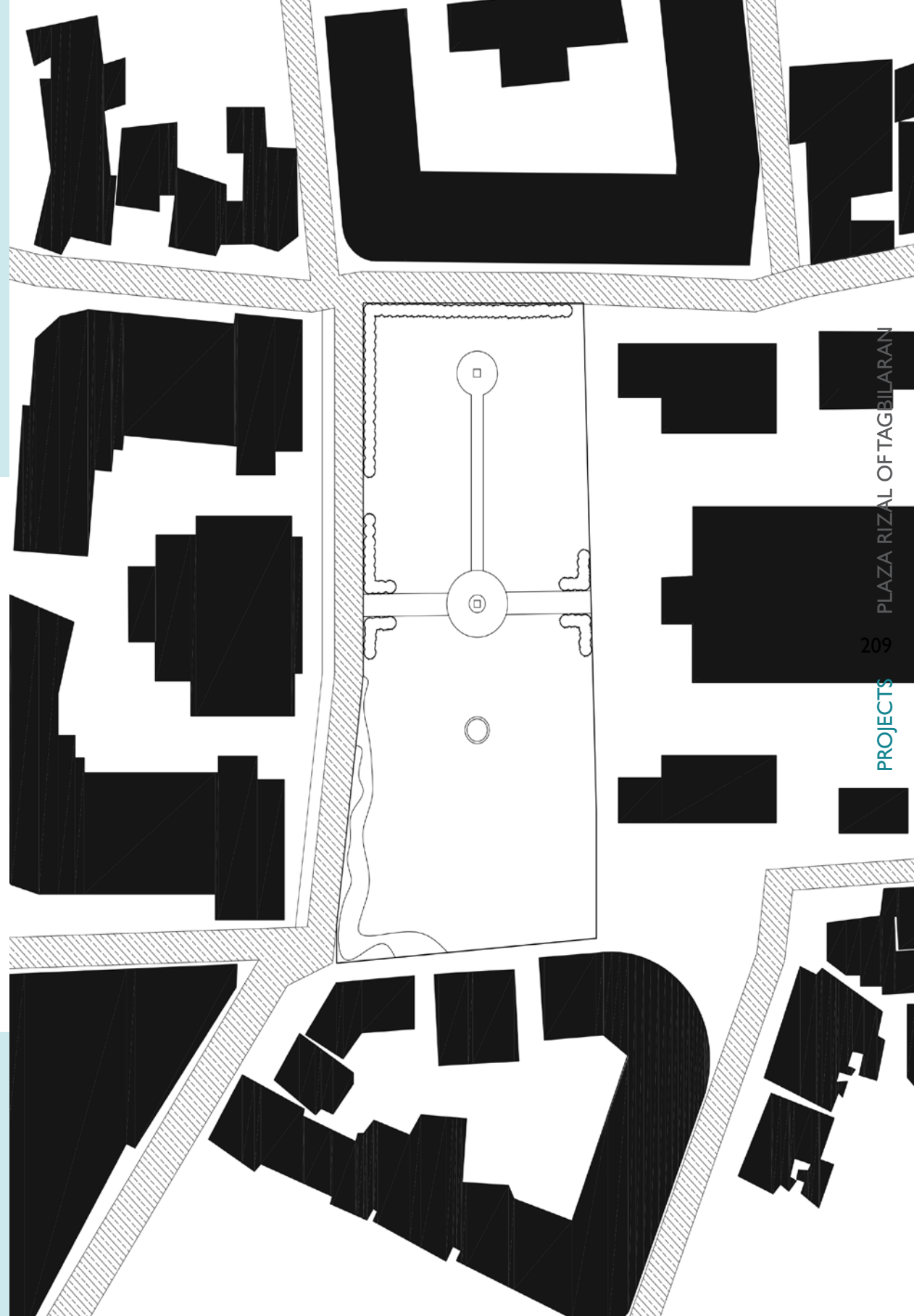
RIGHT | Croquis of current plaza layout by Lotta Nylund

LAYOUT

History, Location, Culture, Today | ANALYSIS I

Public Space, Traffic, Tourism | ALTERNATIVES II

Function, Materials, Surroundings | NEW PLAZA RIZAL III



PLAZA RIZAL OF TAGBILARAN

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PROJECTS

I.ANALYSIS

HISTORY

The streets in Tagbilaran city have not changed much since the Spanish regime. Main streets still go straight though the city center as well as the Bohol coastline road. Some of the traditional old houses and buildings are still standing. The unpainted houses are sometimes called “ghost houses”. Reparations have to be handmade though this craft is being forgotten. New houses do not follow the vernacular and one by one, they are covered with ads and electronic prompts. The building heritage is disappearing right in front of our eyes.

The city center still has many of the older original buildings. The Cathedral of St. Joseph the Worker is the oldest among them getting its appearance in the mid 1800’s (Regalado, 2001). It took a long time to be built and has been reconstructed throughout history. The plaza in front of the church was constructed in 1860, but there are no official drawings of it. Originally the plaza was named Plaza del Principe, in honor of Alfonso XII of Spain (1857-1885). Now it is called Plaza Rizal after José Rizal (1861-1896) (Regalado, 2001).

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BELOW | Photo by Lotta Nylund



Rizal was a Filipino nationalist who through his writings greatly influenced the activities that lead to Philippines’ independence. Around 1916 a bandstand was introduced to the plaza by American officials, the bandstand is still there (Regalado, 2001). On the other side of the plaza is the former Provincial Capitol (City Hall). It was built between 1855 and 1860 when Tagbilaran was declared the capital of Bohol. Adjacent to City Hall, two low school houses made by local limestone were built in 1856. The one on the east side was demolished in mid 1900’s to give way for the construction of the Philippines National Bank (Regalado, 2001) that is now accompanied by a tennis club building.

LOCATION

Plaza Rizal is located approximately 300m from the Totolan Bridge to Panglao which is where the new international airport will be built. The ferry is 1.6km from Plaza Rizal and the university area is less than 1km away. The bus terminal, the city market and Island City Mall (ICM) are about 2.5km from the plaza. Since Plaza Rizal is in the center of the city one will find most things needed within 500m, but the pedestrian situation is lacking.

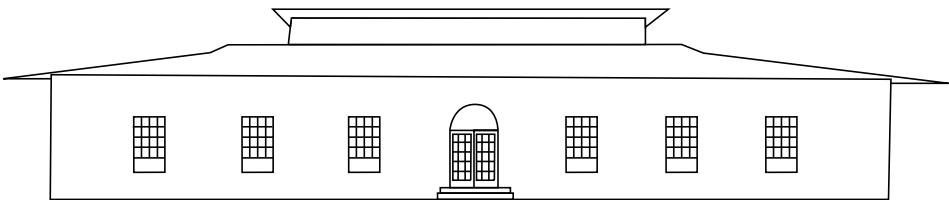
Tagbilaran as a city does not have a clear hierarchy. Residences, malls, hardware stores and restaurants are all mixed together. This makes it challenging to navigate about if unfamiliar with the surroundings. A clearer city centre should bring hierarchy to the blocks and their subcomponents.

BELOW | Photo from the Julio Cardinal Rosales Collection, found in Pagsulay, Churches of Bohol Before and After the 2013 Earthquake by J. Eleazar R. Bersales (Mandaue city, Cebu, 2014)



CULTURE

In history books Bohol’s culture is described as very friendly and welcoming (Alepedonu & Saloma, 2011). Filipinos are described as festive and loving people (Anon, 1999). Many of these kinds of happenings have moved into the shopping malls, but there are still some street festivals which always start from Plaza Rizal. Whereas today’s indoor events are often talent shows, the old festivals often focused on food (Anon, 1999).



212 FAÇADE OF FORMER CITY HALL

BELOW LEFT & RIGHT | Walk from plaza to main church (Church front) and back.
Photos by Sophie Regal & Lotta Nylund



PLAZA RIZAL TODAY

Plaza Rizal is very formal in its design. All routes are straight, focusing on the centre, making it appear smaller than it is. Moreover, trees are scarce, high and narrow. There are many barriers around the plaza such as a low wall separating it from the roads, a metal fence and a hedge surrounding it. Inside the plaza there is a fountain that is fenced in and not in use, from gathered information the conclusion was that it was seen as a waste of effort and money to keep it functioning which was quite surprising given the potential it offers to the public space. Fountains are cooling and refreshing for both body and mind. In many warm countries, such as Spain, this would be a focal point.

The benches in the shadow are mostly used for manicure services, making them unavailable to the public given that only costumers sit on them. Some benches are also used for siestas and the bandstand is where the younger groups hang out. In general, west and middle parts are livelier and the east part is quieter. One corner of the plaza is used as a city drainage point, occasionally leading to bad smells. The vehicle traffic uses Plaza Rizal as a roundabout where there is only one crossing.

During night the plaza is lit up by street lamps and trees. Traffic is still busy around the plaza, but it is still one of the liveliest and most romantic outdoor spaces in Tagbilaran during the evenings. Couples hold hands on benches and groups are happily chatting or walking around. The atmosphere is very relaxed and safe. The plaza is a birthplace for Tagbilaran’s nightlife and it would be easy to expand it to the surrounding buildings if the access was improved.

II.ALTERNATIVES

PUBLIC SPACE

Since Tagbilaran doesn't have much public space most of the activities have been moved to the shopping malls. People meet, play games (arcades), eat, participate or watch live performances indoors. Some argue that the malls are the new public space of Tagbilaran and since malls are air conditioned, thus more pleasant. But malls are by definition a commercial space. Even though you can go there without being a consumer, the pressure to spend persists. On site interviews made it evident that people without financial means seldom entered the malls. Enjoying public space should not depend on buying power.

The markets are another place where public activities occur. In the mornings, the fish market attracts many people. They can chat with their groups of friends, watch people pass by and greet neighbors as they arrive. But the fish market is only active for a few hours and many of the other roofed markets are too crowded with stands for this kind of activities.

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BELOW | Photo by Lotta Nylund



TRAFFIC

Transportation in Tagbilaran can be divided into five types: private cars, motorcycles, multicabs, tricycles and pedestrians. Cars and motorcycles wish for parking lots nearby the plaza and they are usually parked by the sides of quiet streets. There is also parking on abandoned lots next to the plaza. A part of Plaza Rizal has also been remade into parking space, which is a shame since Tagbilaran has so little public space and Plaza Rizal is too important for giving up space for parking lots.

Tagbilaran has two types of public transportation: multicabs and tricycles. Tricycles are cheap and widely used. Multicabs have a fixed start and end point, so for Plaza Rizal to be well used it is essential to keep the nearby multicabs and tricycles pick up points.

Pedestrians use whatever space is left. There is a lot of traffic around Plaza Rizal and the only street crossing faces the church, but most visitors come from Carlos Perez Garcia (CPG) Avenue. As traffic grows, streets become much harder for pedestrians to cross without proper crossings and traffic lights. When this happens traffic is usually redirected outside the centre, relieving it from the pressure and making drive through traffic faster and smoother.

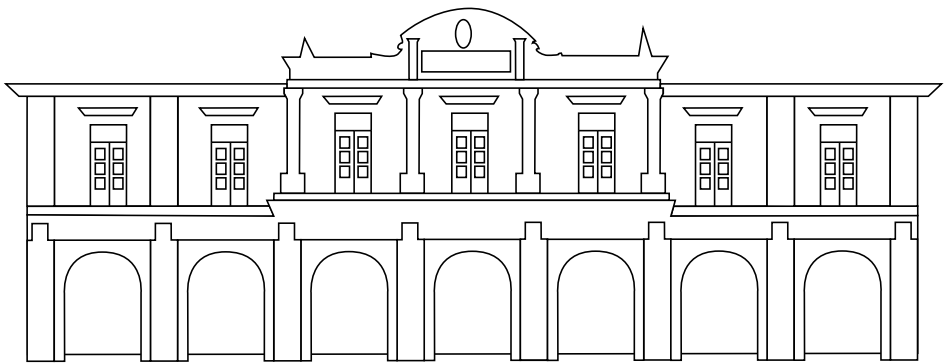
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BELOW | Photo by Lotta Nylund



Four scenarios have been studied to determine their effects on Plaza Rizal. First a wider bridge to Panglao Island with a circle road outside the city centre, second a new bridge to Panglao Island at the pier together with a circle road outside the city centre, third both the pier bridge and the old bridge in use to Panglao Island and new road on recovered land, fourth Tagbilaran without further traffic planning.

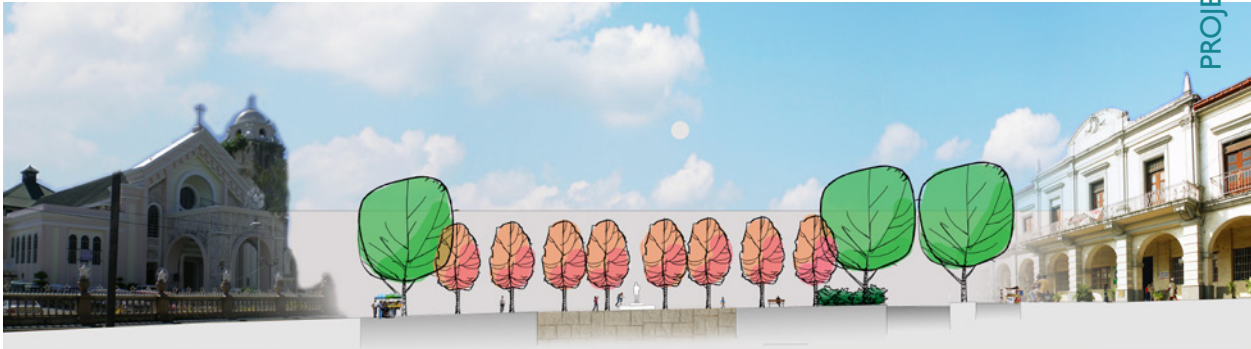
Without traffic planning, traffic will grow in the centre. Plaza Rizal will be even more difficult to access, noisier, more air polluted and isolated from its surroundings. All scenarios, but the last one, propose that the traffic will partially move away from Plaza Rizal. The least probable road to decongest is J.A. Clarin Street and CPG Avenue. However, J.S. Torralba Street and Bohol Circumferential Road will be quieter if traffic is redirected and CPG Avenue becomes a two way.



TOURISM

Tagbilaran has good connections by ferry, plane and bus but there are few tourists in the city. Tourists arrive in Tagbilaran as through passersby. Reason being that some only travel for leisure and wish to stay at luxurious hotels, some seek adventure, and some like city walks and cultural activities. For Tagbilaran's tourism to grow, improving it within the city is a good option. City tourists like to walk around when sightseeing but the sidewalks and street crossings are narrow and few, making them feel unsafe. Furthermore, the traditional houses that many city tourists love to pass by are hidden behind ads. Tagbilaran has planned a heritage walk that would pass by these traditional houses, the museum, Plaza Rizal and the church. The city centre and Plaza Rizal are great to visit as a tourist. If more information was spread about Tagbilaran and its heritage, walkability improved and guided heritage walks for tourists established, Tagbilaran would see its tourism grow.

CROSS SECTION OF PROPOSED



LONGITUDINAL SECTION OF PROPOSED PLAZA



III. NEW PLAZA RIZAL

FUNCTIONS AND ACTIVITIES

The new design opens up the plaza by removing barriers and making the whole area accessible for users. Commercial use, such as street vendors and street services are welcomed in the west parts of the plaza which takes the form of a square. The square is closest to the city’s commercial area and is where most visitors enter first.

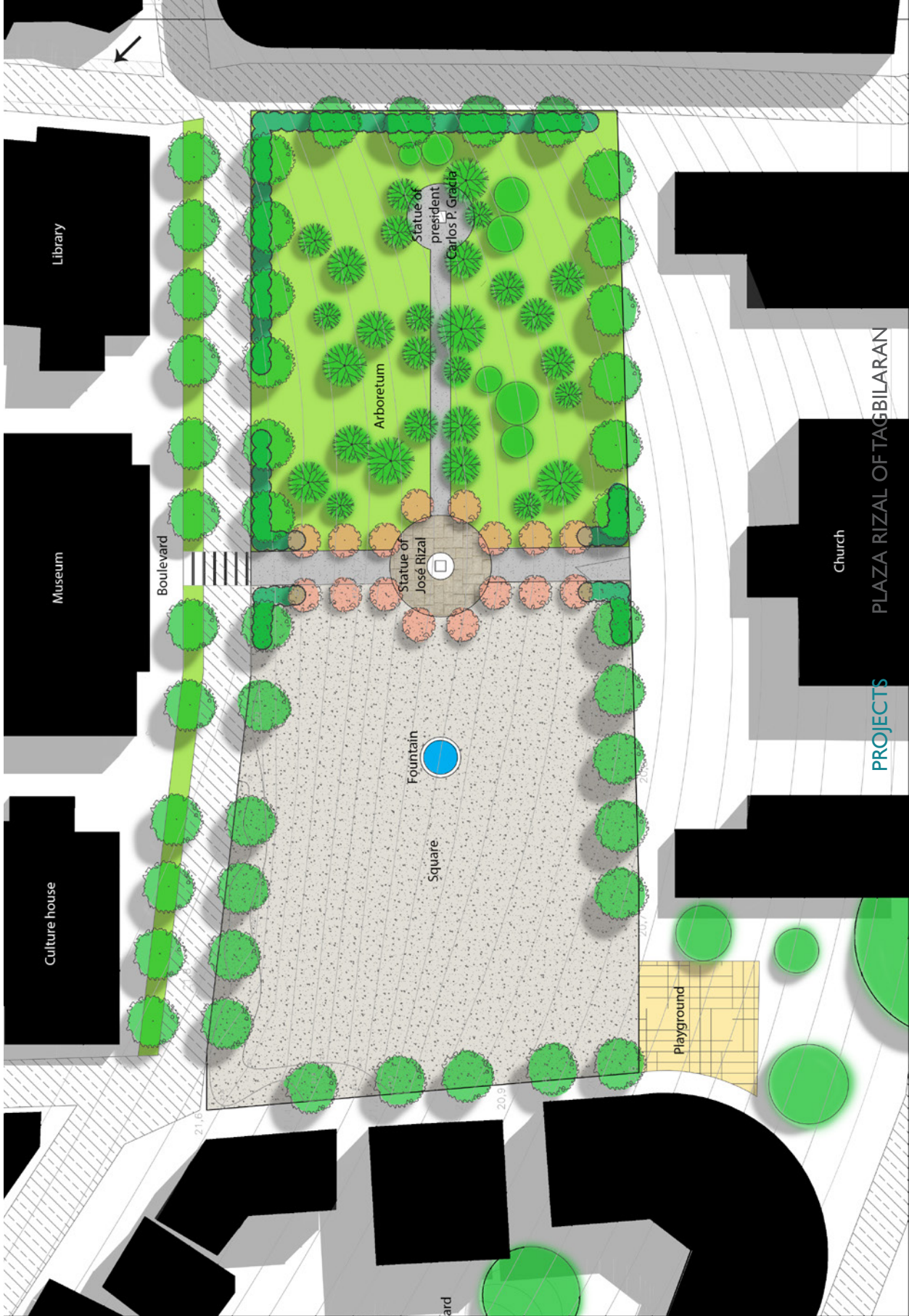
Benches are located under the trees and along the walk paths for resting and socializing. The benches outside of the square will not be for commercial use. Accessibility is improved by closing J.S. Torralba Street and Bohol Circumferential Road. A new street crossing with traffic lights across CPG Avenue connects Plaza Rizal to the museum and the heritage walk. Thereby Plaza Rizal is connected to the commercial CPG Avenue and the surrounding buildings.

A low stair flows on the north-west corner and separates Plaza Rizal from traffic. This stair signals the starting point of Plaza Rizal. The square is open from all directions and the tree alleys provide a shade for standing or sitting during daytime, offering a view over the surroundings while not getting too much attention to it. The edge of the fountain will also be widened for comfortable seating.

The square is kept open to provide a good space for evening happenings such as dancing, concerts, outdoor theater, festivals and other nightlife activities. Occasionally during daytime tents can host bazaars or short term events. Open space gives the opportunity to change Plaza Rizal to whatever it needs to be.

The central axis going from the church to the museum is a historically important axis that has been there since the original Plaza del Principe. The axis also links this new Plaza Rizal with its history as a formal plaza connecting the state (currently a museum that was originally City Hall) with religion (church). In the center of the axis stands the statue of José Rizal, whom the plaza is named after. Around the statue there is an open space and benches for a natural resting point for visitors. This opening is highlighted by ornamental trees and special pavement.

RIGHT | PROPOSED PLAZA (AERIAL VIEW)



MATERIALS

The green space of Plaza Rizal consists mainly of uncut trees, making a boundary around Plaza Rizal and the boulevard. The trees around Plaza Rizal and the boulevard are chosen to be high enough to keep views open and hold wide crowns to give maximum shade. The pavement in the square supports multifunctional use and is easy to maintain. The pavement should be beautiful and durable to support extensive use.

The central axis from the church to the museum as well as from the statue of José Rizal to the statue of Carlos P. Garcia can be paved with concrete blocks, but the opening around the statue of José Rizal will be paved with a high quality, preferably local, stone that forms an interesting pattern. The trees along the central axis from the church to the museum are ornamental trees with a intense and beautiful flowering period that bring a higher status to the main axis.

The arboretum is a collection of local trees with small signs, informing visitors about the natural flora in Bohol and their cultural uses. The lawn consists of durable and drought resistant grasses to minimize maintenance and withstand extensive use. With the lawn as the ground, trees as the roof and hedge as walls the arboretum will become a more peaceful and relaxing public space.

FINAL PROPOSAL RENDERING



SURROUNDINGS AND SERVICES

With the two closed streets, the surrounding blocks can interact with Plaza Rizal. In the south corner of the square, a tourist center with a curved façade will lead tourists into the heart of the city and heritage route. The tourist centre is on a quieter street that is still easily accessible by vehicles, easy to find and close to many tourist attractions. Outside of the tourist centre a playground for children and some trees with benches under them can be found. This is a good meeting point for guided tours or catching a tricycle.

The block next to the square (and its courtyard) has services that support street life such as cafés, shops or pubs. The museum is situated in the middle of the block and is accompanied by a culture house on the right and a library on the left. All together, this block offers a variety of public services. The culture house and library are extended to the buildings behind them and the rest of the buildings in the block support other services such as galleries, cafés, gift shops, conference hall, or carinderias (lunch restaurants). The courtyard has some vending stands, a pedestrian route and part of the heritage route.

The church is accompanied with two lower buildings providing service for the church and visitors. These buildings will frame the church and provide Plaza Rizal with some framework. As J.A. Clarin Street will become the border to the public space. The block east of the plaza will have a unified façade to frame the public space.

AXONOMETRIC | NEW PLAZA



LIVING WITH THE SEA

INCREMENTAL DEVELOPMENT OF INFORMAL SETTLEMENTS IN TAGBILARAN

Hannele Cederström, Kiira Piironen

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Several informal settlements exist on the coastline of Tagbilaran. Relocating settlers inland is part of the current urban development plan of the city, which contradicts the fishermen tradition of the coastline settlements. Previous relocation attempts have in many cases caused financial problems for the settlers leading them to return to the settlements. The objective of this project is to show that the joint development of the coastline and existing settlements can benefit each other.

The project focuses on incremental development by socially sustainable methods where the community is empowered and planning is based on a participatory process and the use of local typologies. Living with the sea has the potential to combine living with livelihood and social life, but it also includes the responsibility to improve natural hazard resilience and environmental consciousness for the sustainable future of the seaside. This project consists of three parts: analysis of the current settlements, studying different possibilities for the settlers, and the further development of one concept.

RIGHT | Lookout to the informal settlements by the fish market
Photo by Hannele Cederström

LAYOUT

- Current Situation, Social & Spatial Structure | ANALYSIS I
- Living with the Sea, Urban Integration, Inland Relocation | CONCEPTS II
- PROJECT III
- CONCLUSION IV

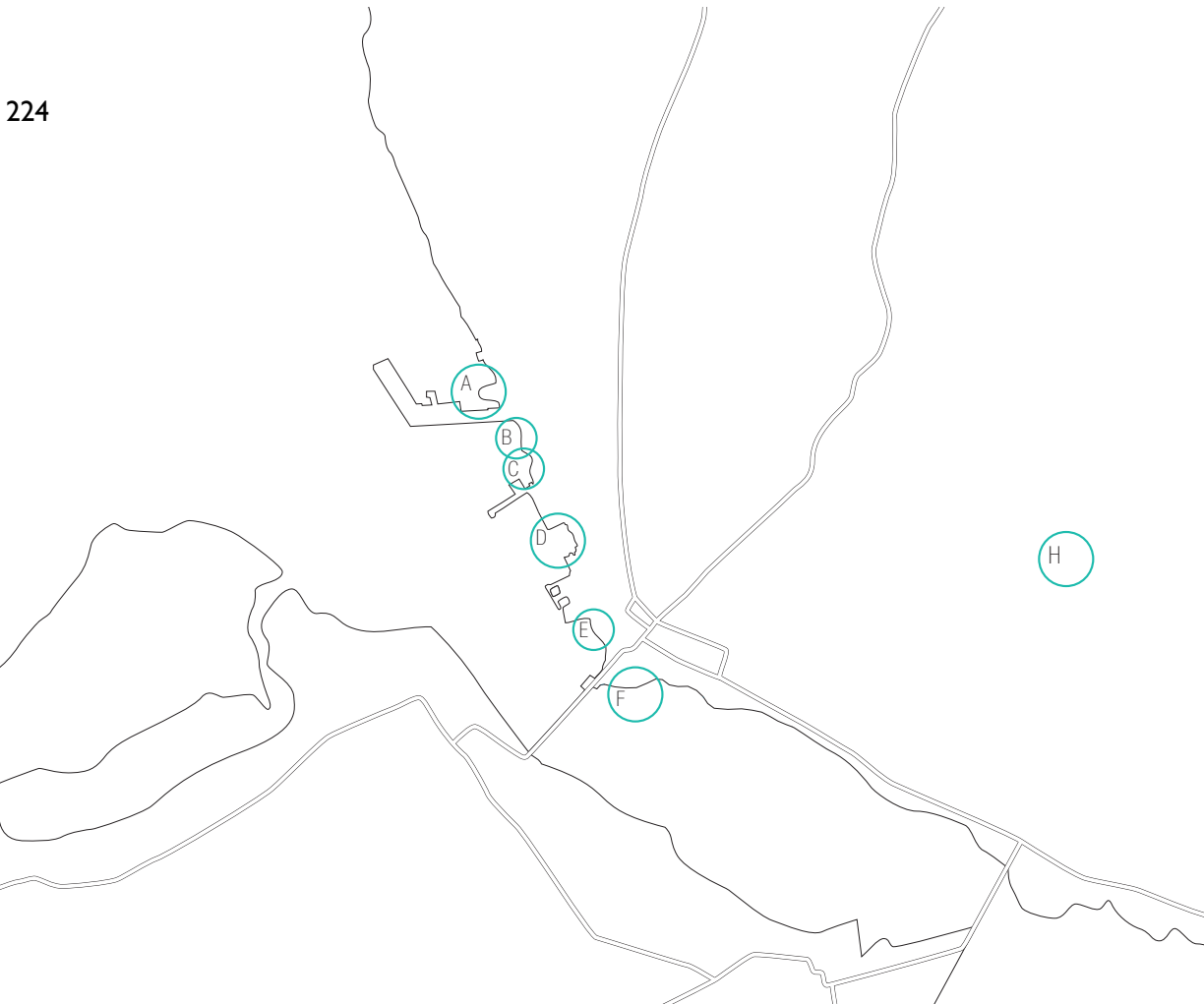


I.ANALYSIS

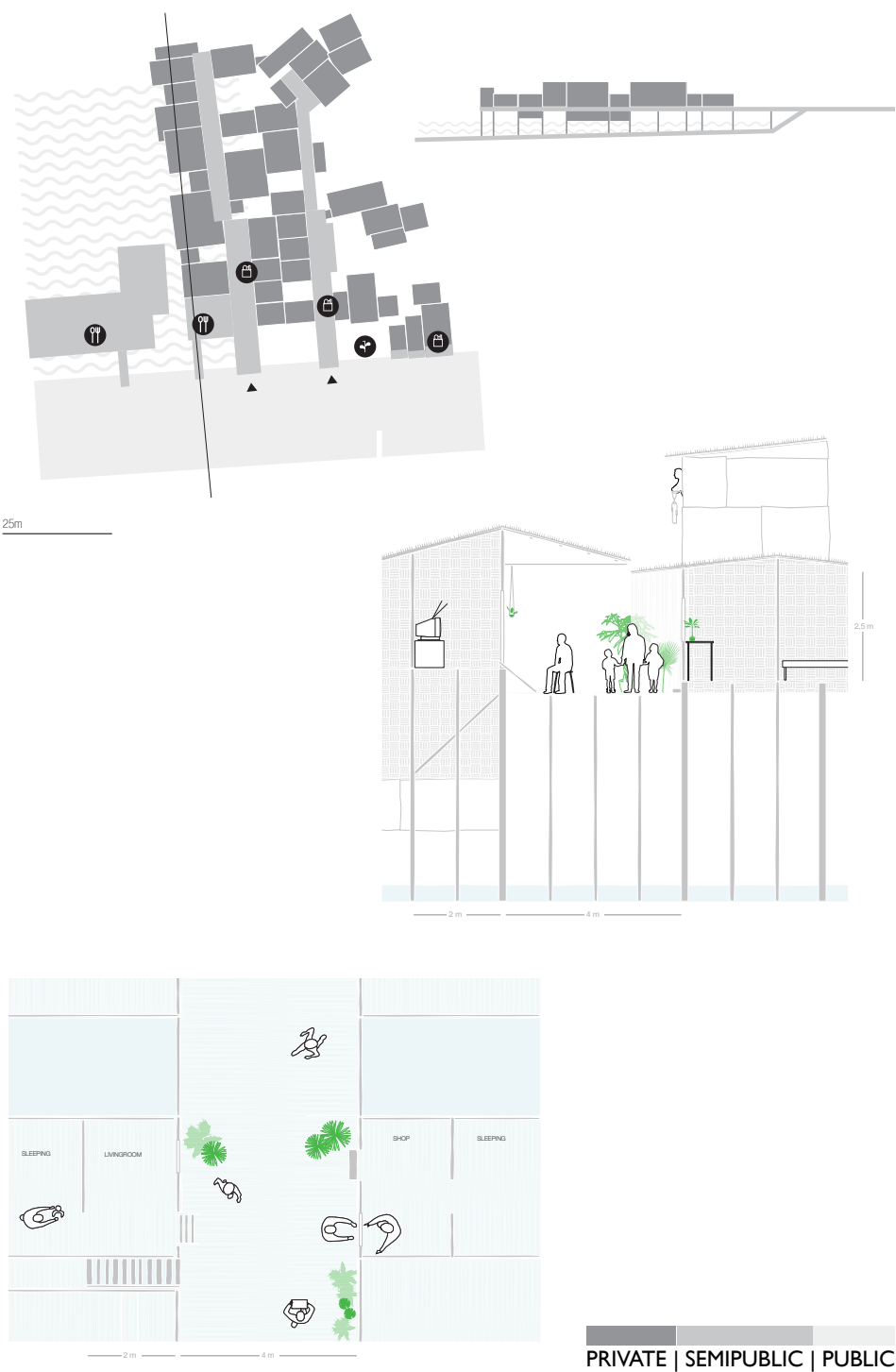
This chapter introduces how people live by the area and what is the current situation of the informal settlements. An important part of the analysis process was interviewing different stakeholders during the field trip to have a diverse impression of the situation. The interviews include multiple residents of the informal settlements, Tagbilaran town planning office, Social Office, Social Action Center, UN-Habitat for Humanity office, and Barangay Captain office.

The field trip included visits in five different coastline settlements as well as one inland relocation site, Habitat, outside the city. The analysis contains a detailed study of the spatial structure of the studied settlements. The mapping revealed the scale, density and facilities of each settlement and how they connect to their surroundings.

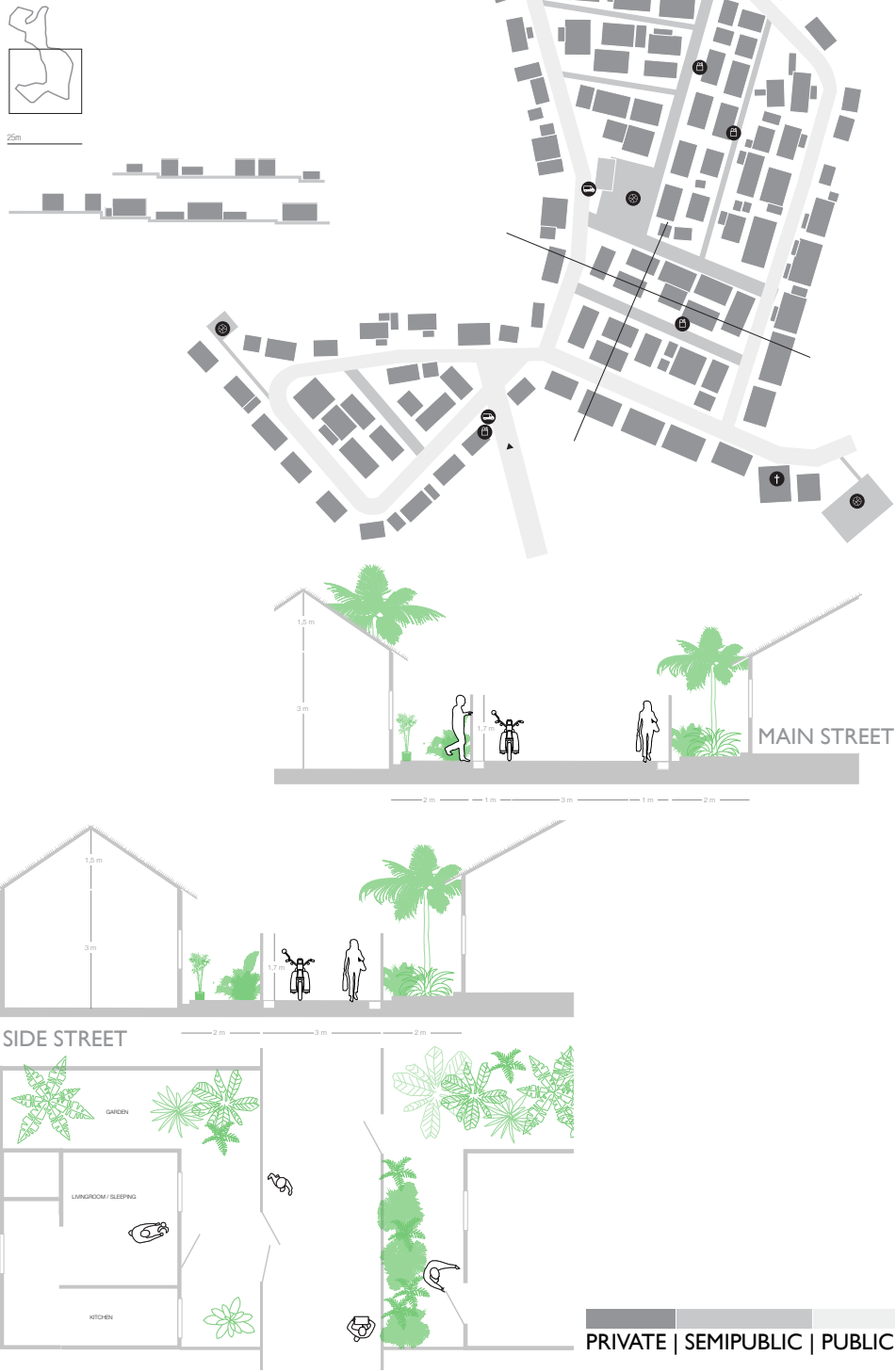
INFORMAL SETTLEMENTS | SITES



SETTLEMENT A | FERRY TERMINAL PIER
PLAN & SECTION

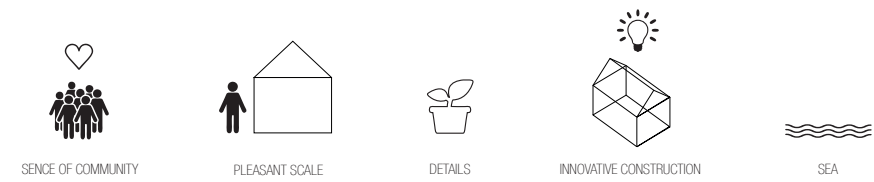


SETTLEMENT H | RELOCATION SITE
PLAN & SECTION

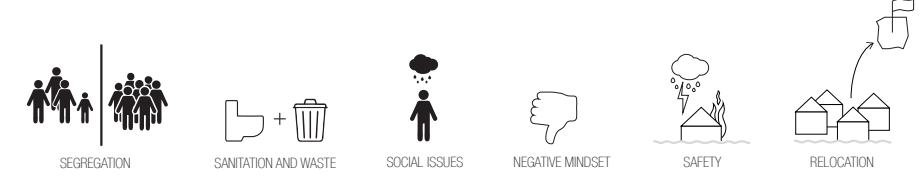


CURRENT SITUATION

The study showed that the informal settlements have some problems but also a lot of potential. Due to the existing density and structure there is a pleasant human scale in each settlement. The tight scale creates a tight sense of community. The visual image of the settlements is rich because of the personal expression through innovative use of materials and details (such as plants hanging of the walls as ornaments). The use of decorations creates a sense of belonging and ownership, even if the legal ownership is missing. The location of each settlement is ideal because of the good connections to the important social and economic spots of the city such as the church, fish market and the commercial center.



On the other hand, the tight structure on public routes and dead end paths create safety problems in emergency situations (i.e.: fire). Also sanitation and hygiene facilities are inadequate and thus the coastline water and soil are badly polluted and covered with trash. The most common sanitation system in the settlements is a shared pit latrine, where both solid and liquid waste are directed directly into the sea. The polluted water is a high health risk because of epidemics (World Health Organization, 2003). There is no proper waste management, except for materials collection, such as plastic bottles, and there is a lack of responsible attitude for preserving nature. The settlements are mostly built on wooden or concrete stilts above the sea level. The wall and roof materials differ from bamboo leaf weave to wood or bamboo planks or metal plates. Some of the houses inland are built with stronger materials such as tiles and concrete but the shacks above the sea are reasonably weak, which causes them to be very vulnerable to natural hazards and sea level rise. Some piers are nearly dangerous to walk on because of the lack of proper building materials. Moreover, the fact that the settlements are close to the city does not integrate them, which increases the segregation. The settlers are constantly living in fear of getting relocated because they do not have legal rights for the land. The land is mostly privately owned and very expensive, which makes it difficult to reclaim.

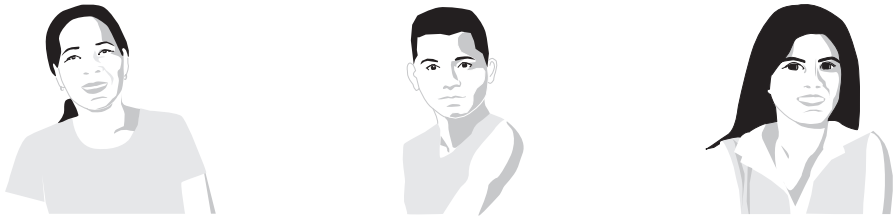


SOCIAL STRUCTURE

One of the biggest challenges of improving the living conditions of the settlers is persuading the town planners and officials to consider the settlers' rights as equal citizens. Ideally, the most optimal situation would be the "formalization" of the informal settlements. Interviewing both the city officials and the settlers revealed mutual confrontation and prejudice that affect an objective decision making process. Currently the settlers communicate most efficiently with the decision makers through the Barangay Captain, who acts as a connection between the settlements and the city. The city officials can consult the Captain about issues in the settlements and ask for help (i.e.: to implement plans such for the relocation process). The Barangay Captain also provides medical help, such as, controlling nutrition of small children and helping with domestic problems (the biggest being due to alcohol abuse). (Real, 2016)

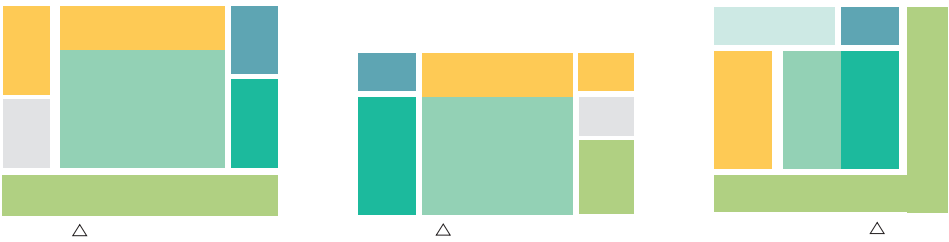
There is also an organized Seaside association group inside the informal settlements to communicate with the city and control the settlements. The association can take care of more practical matters such as repairing the settlement as well as defend the rights of the settlers (Egagamao, 2016).

There seems to be smaller social units inside the settlements formed by neighborhoods composed of relatives. Most of the settlers themselves are fishermen families. Typically, the men earn the livelihood and women take care of the household and children. Children start primary school around the age of three and women are expected to take them to school and provide lunch, which makes it problematic to stay in full-time work. Some women keep their own small shops but a better daycare system would provide them with more possibilities to secure more earnings for the family. There are also boarding houses that provide low-cost rental accommodation for students. Most of the residents there are mall workers or students. This group of people is also the major focus of the town officials, which ultimately ignores the fishermen needs. A minority of the settlers are professionals with slightly better income. These people are also less dependent of the sea, have better possibilities and are willing to relocate. (Lady, 44; lady, 54; woman, 20; man, 26; personal communication; January 2016)

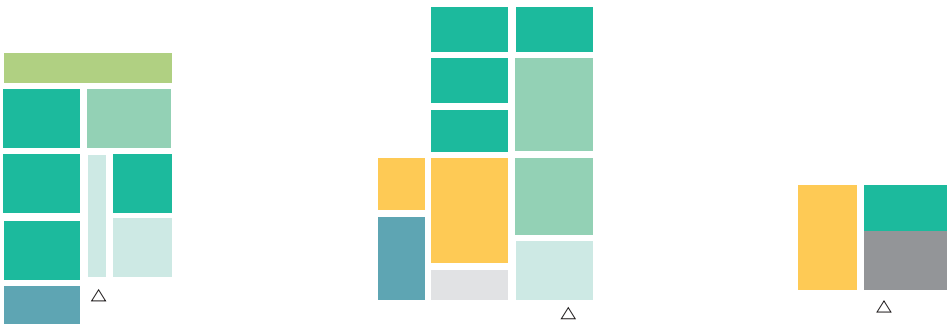


SPATIAL STRUCTURE

The spatial structure of the houses is simple but still different activities are logically divided in private and public zones. Because of the climate and the compact size of the houses, the inside and outside spaces are not strictly separated but more overlapping with each other. There are different shared spaces such as simple shaded terraces, kitchens and fireplaces as well as unofficial laundry areas along the settlement squares and connecting bridges. The spaces that are used during the daytime are often strongly connected to the outside spaces. This way the neighbors can be seen conversing and watching television through open windows or doorways. The more private spaces, including sleeping and sanitation, are located further from the shared areas to provide some privacy. The further from the shore the buildings are located, the more connected they are to the water. At the back of these houses are often open terraces facing the sea that function as piers for the small fishermen boats.



HABITATS

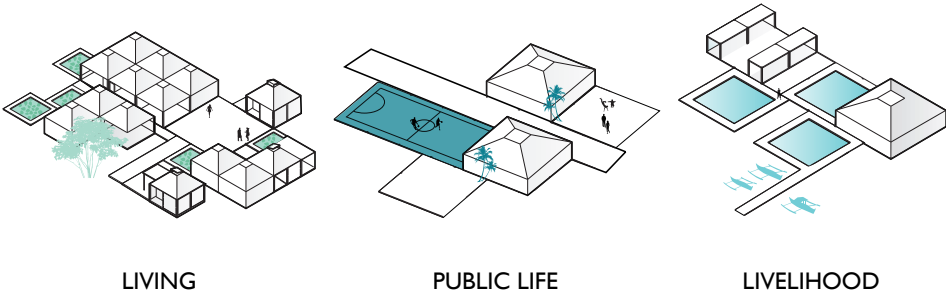


SETTLEMENTS



II. CONCEPTS

After analyzing the current situation, urban scale concepts were developed to study and compare different possibilities for relocation. The concepts are divided in three groups: living with the sea, urban integration and inland relocation.



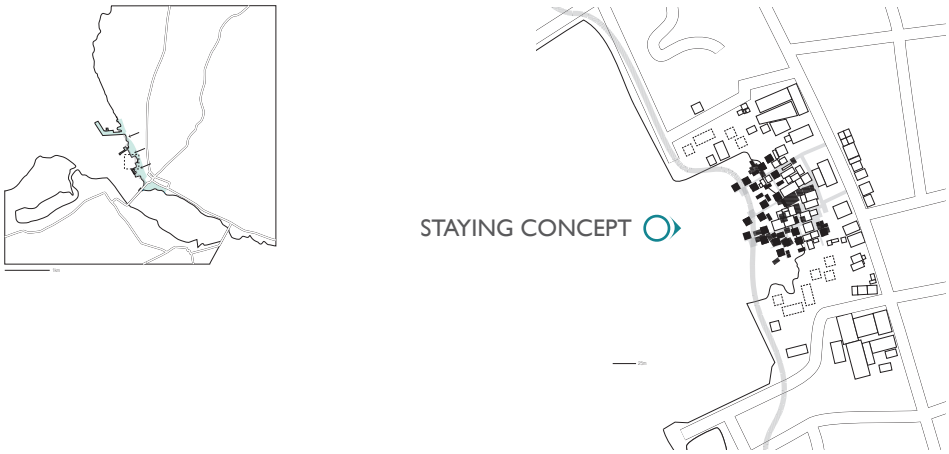
BELOW | Lookout to the informal settlements by the shore
Photo by Hannele Cederström

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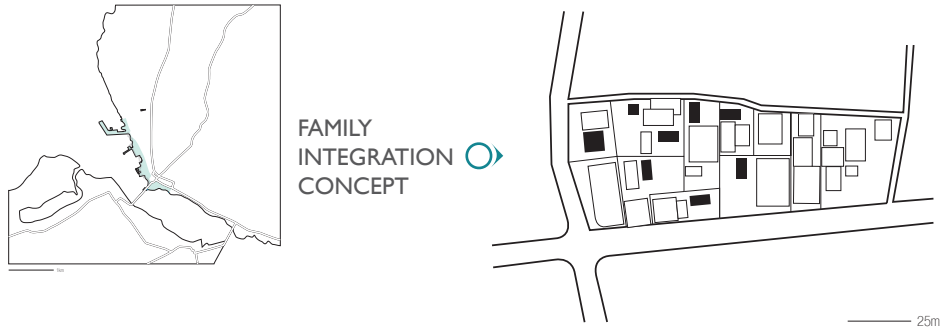
LIVING WITH THE SEA

STAYING | PANGLAO BRIDGE | FLOATING VILLAGE



URBAN INTEGRATION

ROOFTOP GARDEN | EMPTY PLOTS | FAMILY INTEGRATION



INLAND RELOCATION

OLD AIRPORT



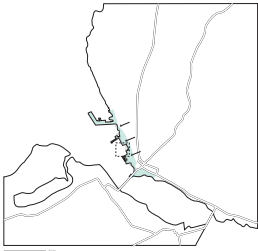
LIVING WITH THE SEA

Living with the sea category has three sub-concepts. All of the three concepts share the same principle of an incremental floating structure. The aim is also to show that the settlements can be part of the existing coastline development plans giving the coastline a strong local character.

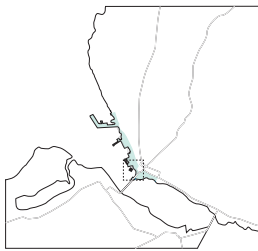
This staying option focuses on site development and preservation of lifestyle and livelihood. This will be achieved by bringing improvements to the existing settlements and creating an organized system for them to grow. The floating village is an adaptable structure that takes advantage of the flexibility of being located along different places in the coastline. Because the floating structure does not require any land it is independent of land cost. The third concept is called bridge and it is a floating structure located on both sides of the existing Panglao Bridge. The bridge is offering both good connections to the city, as well as the fish market, and connects the settlers, residents and tourists.

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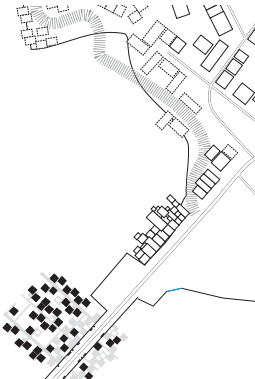
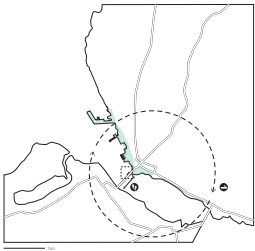
STAYING



FLOATING VILLAGE

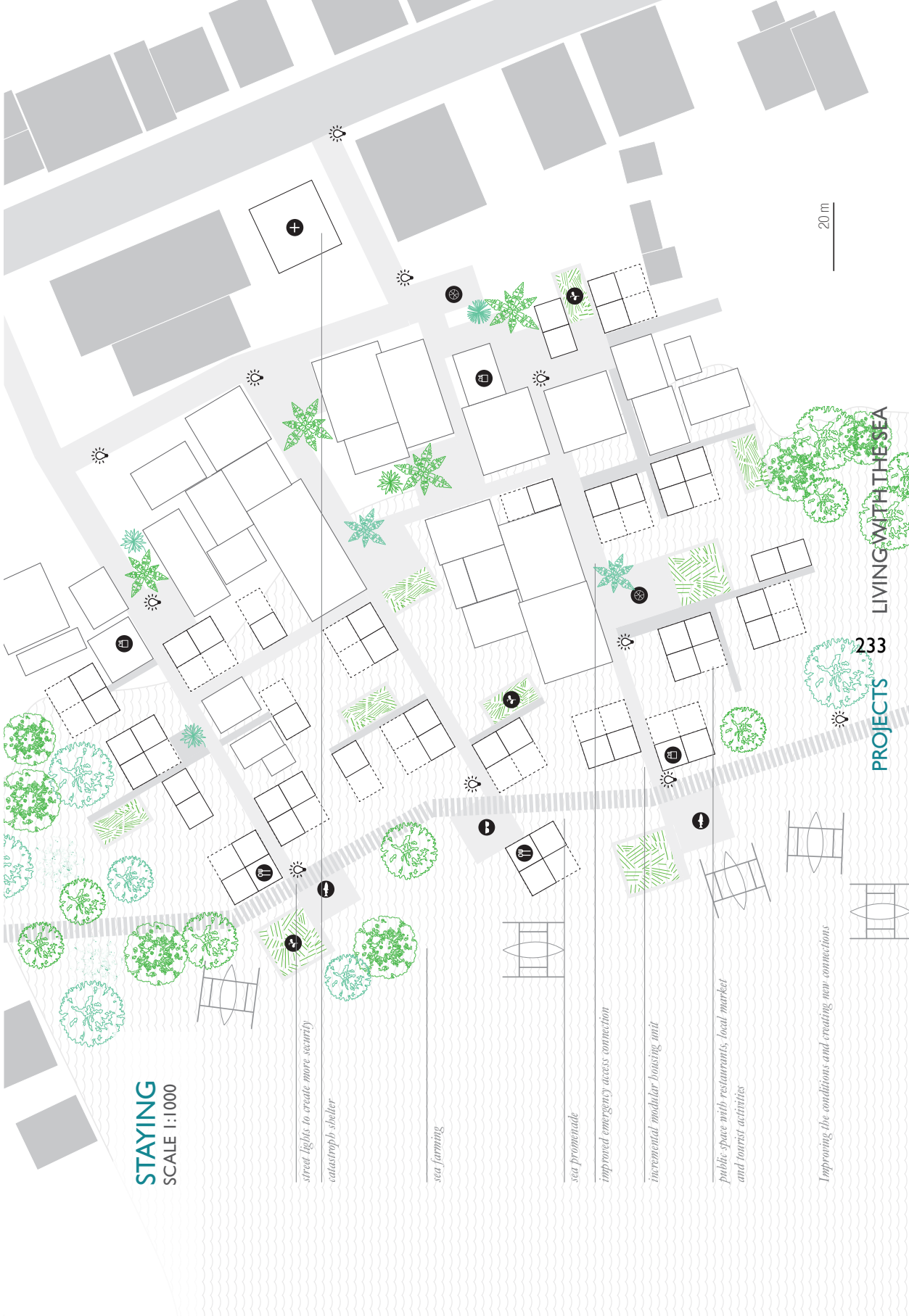


PANGLAO BRIGE



LIVING WITH THE SEA
PROJECTS

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STAYING
SCALE 1:1000

street lights to create more security

catastroph shelter

sea farming

sea promenade

improved emergency access connection

incremental modular housing unit

public space with restaurants, local market and tourist activities

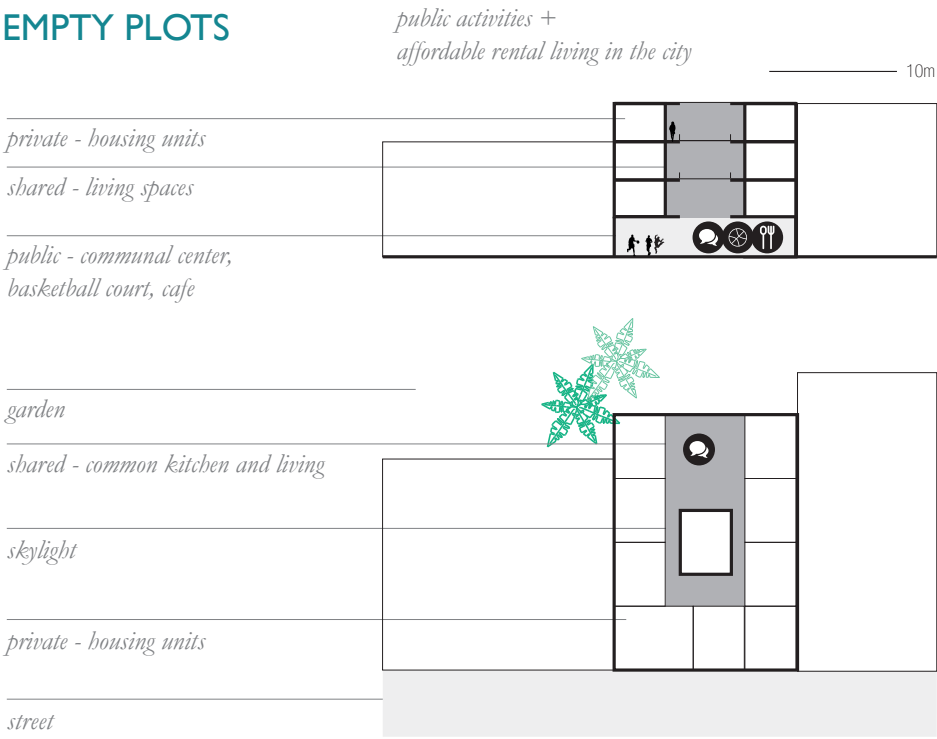
Improving the conditions and creating new connections

URBAN INTEGRATION

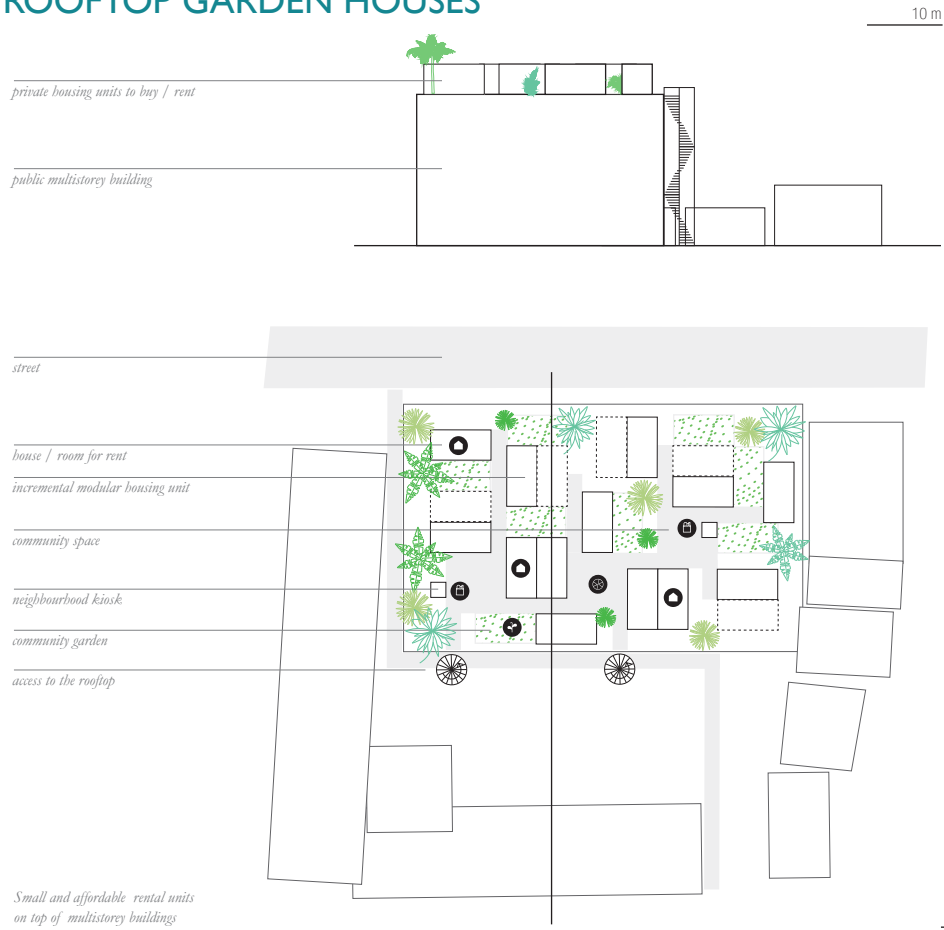
This concept consists of three different sub concepts that aim to mix people and remove segregation. All of the urban integration sites are based on a good location in the city while still maintaining good connections for the fishermen to the sea. Rooftop integration is an easy option for finding land in the center of the city. Small communities could be relocated to the rooftops where they still could maintain sense of a small and tight community. As an advantage, they would be more immersed in the city life and surrounding communities. In this scenario the structure of the old buildings have to be studied carefully before adding more structures on top of their roofs. The empty plots offer similar possibilities as an option, especially for the boarding houses, where social housing could be combined with public services. Bringing public life together with housing could help to connect different people and fund the project. Structurally the public services could be located at the open ground floor and the private housing with communal shared spaces located on the upper levels. This concept has challenges with land ownership and funding. The smallest and easiest integration option is family integration that could be a possibility to get an extra income by providing a rental room or a small house in the back yard. This type of rental housing would be a good option for the boarders offering also valuable social connections.

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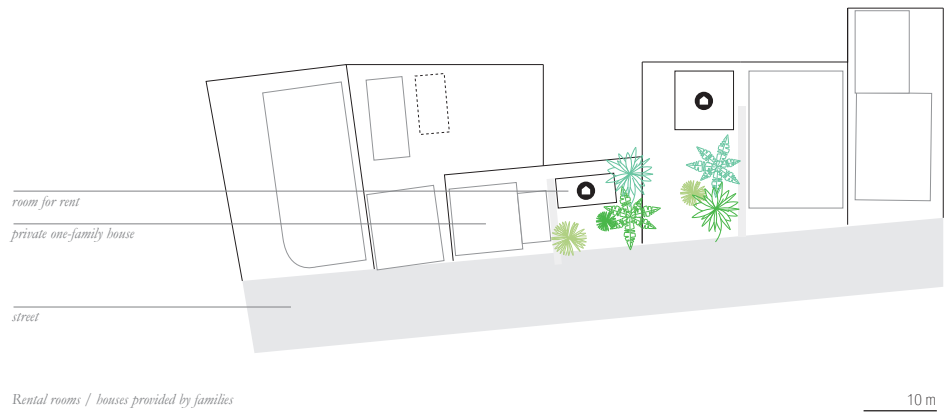
EMPTY PLOTS



ROOFTOP GARDEN HOUSES

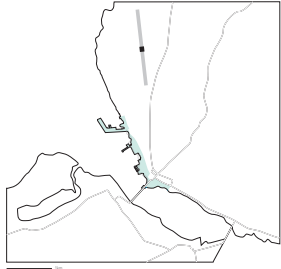


FAMILY INTEGRATION



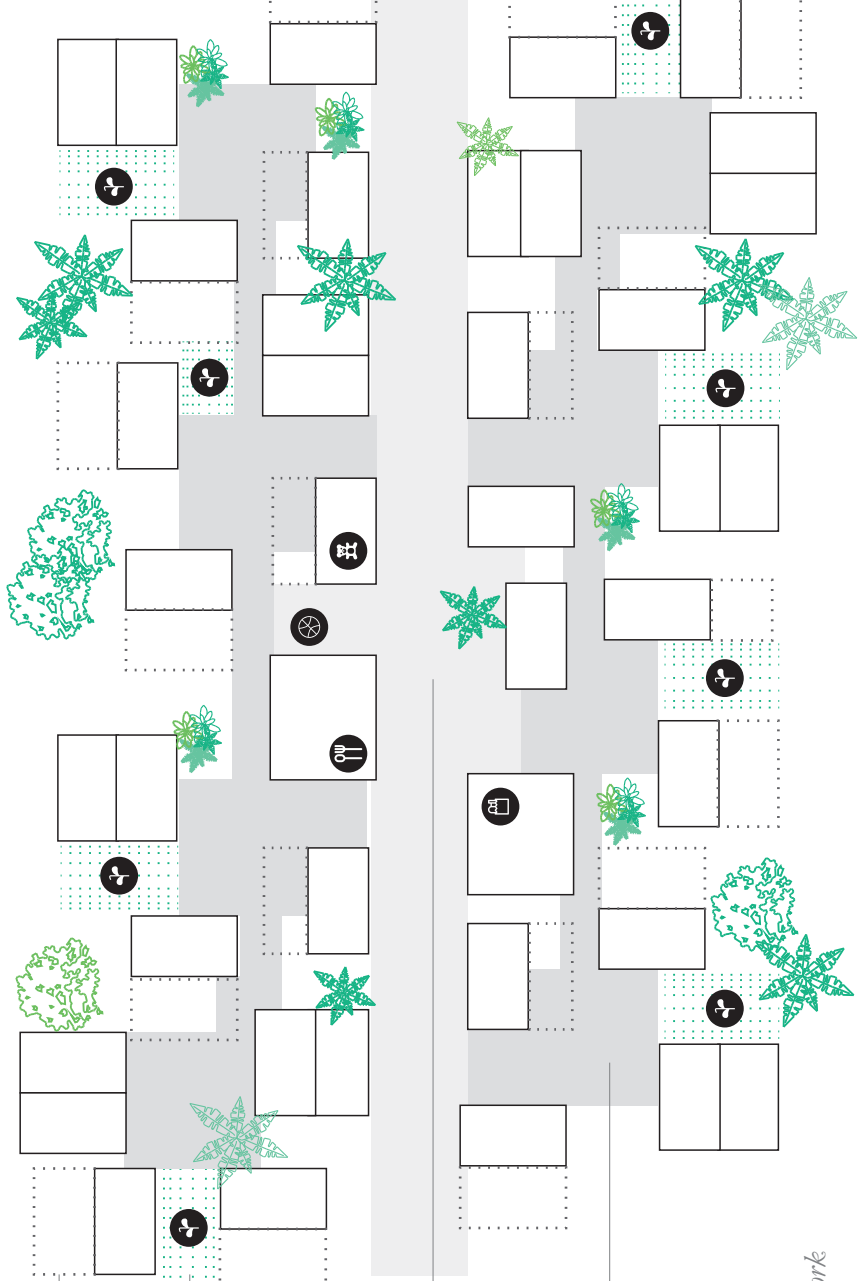


50m



INLAND RELOCATION

Due to a more remote location this would be a solution for those settlers with a better income who are not dependent of the sea for their livelihood. A new airport is going to be built in Panglao and thus the old airport would offer a good option for the relocation site since the planning of this area is still unconfirmed. The ideal plan would be to connect the housing areas on both sides of the old airport. The aim is to bring the good qualities, such as pleasant scale and a tight sense of the community, from the settlements to the new area. Other possibilities for relocation could be northern seaside, extension of the current Habitat relocation site, or Panglao Island. Distance and income are the main challenges with these relocation sites.



incremental housing

communal gardens

public street with communal spaces
with services and facilities

semi-public neighbourhood spaces

private houses connected to a communal network

10m

OLD AIRPORT SCALE 1:500

CONCLUSION

To achieve a socially sustainable result the focus of each concept is to use participatory planning by involving the community. The use of local knowledge and building skills is important to maintain the uniqueness and cultural value. A test project could be used as a tool for future development and involve the people by using a core team.

The study of the concepts aforementioned revealed that the existing settlement sites create the most sustainable base for development because of their tight relation to the sea as a source of livelihood and as a base for their lifestyle. In practical sense, there is a lot more pleasant microclimate by the seaside. The conclusion is to combine different concepts to provide a suitable base for the variety of settlers. The sea has a lot of potential as a source of livelihood by means of food production, tourism and recreation that is not fully used yet. Showing the potential and importance of the sea and seaside could also help to change some attitudes and start acting more responsibly to preserve the overall area clean.

Because of the good connections to the surroundings, settlement D was chosen to develop the project further. The site can take advantage of the coastline location as well as the connections from the Plaza to Panglao and the fish market.

According to the UN-HABITAT, the slum upgrading is a key for overall urban development. In a larger urban context, it is crucial to start the developing process from the grass root level by first improving the living conditions and the social situation of the most vulnerable and weakest group of people. The current urban development plan of Tagbilaran might not present the most socially and environmentally sustainable development to support the continuity of cultural heritage and building traditions. Even if the grass root based development would be slower, it can lead to more sustainable results. Physical upgrading of slums creates possibilities for both social and economic development. Upgraded slums improve the physical living conditions, quality of life and access to services and opportunities in cities. Economically they trigger local economic development, improve urban mobility and bring a productive sphere to the physical and socio-economic fabric of the wider city. As a result, cities actually profit from investing in slum upgrading (UN-HABITAT, 2016).

RIGHT | The interventions done in the common area (or alleyway) demonstrate an interest from the residents to embellish their neighbourhood. Photo by Kiira Piironen



LIVING WITH WATER

- + lifestyle,
- + tradition & cultural identity
- + livelihood from the sea
- + strong sense of community
- + tourism potential
- + location
- + staying
- + suitable for all user groups
- + sustainable solution
- + own choice
- + possibility to improve the area
- + sea conservation & education
- + coastal development
- current plans for the coastline
- fear of eviction, land ownership
- fire safety
- natural hazards
- sanitation & waste, attitude
- segregation
- polluted land and water
- hard to prove the history of staying
- possibility to sell owned land and move the problem



URBAN INTEGRATION

- + renting & short term staying
- + low cost
- + densifying the city
- + efficiency
- + location
- + services, work
- + integration
- + shared facilities
- + income for host building
- climate
- not suitable for all user groups
- structural capacity
- ownership
- attitudes



INLAND RELOCATION

- + ownhershship, responsibility
- + peacefull neighbourhood
- + free sites
- + possible future development of the area
- funding
- location
- services, income
- segregation
- hard to sell if needed
- lack of communal spaces
- not suitable for all user groups
- insecurity of the future development

III. PROJECT

SUSTAINABLE DESIGN OBJECTIVES

The aim of the planning process is to create a socially and environmentally sustainable base for living by employing a user centered approach and participatory planning. The planning is based on site development combined with the city's seaside development. Therefore, another aim is to benefit from the urban scale development and to combine the new public spaces along the seaside, livelihood from the sea and living. The housing concept is based on incremental development and the use of local building techniques, typologies and spatial characteristics to preserve the local character and tradition. Nevertheless, new techniques are also studied to solve technical problems such as the material resilience and to get advantage of efficient sea farming possibilities. One of the biggest challenges is to create a sustainable waste and sanitation system and natural hazard resilience. The financing must be well planned to provide low-cost housing, to avoid uncontrolled loan systems and to prevent the uncontrolled land value rise of the area. The key for achieving a socially sustainable process is to organize and strengthen the community by encouraging the different personal capabilities. Numerous reference projects about above mentioned themes were studied to find successful methods that could be adapted to this project.

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ON-SITE DEVELOPMENT & USER CENTERED APPROACH



INCREMENTAL DEVELOPMENT & LOCAL TYPOLOGY



LIVELIHOOD & PUBLIC LIFE



NATURAL HAZARD RESILIENCE & ENVIRONMENTAL CONCIOUSNESS

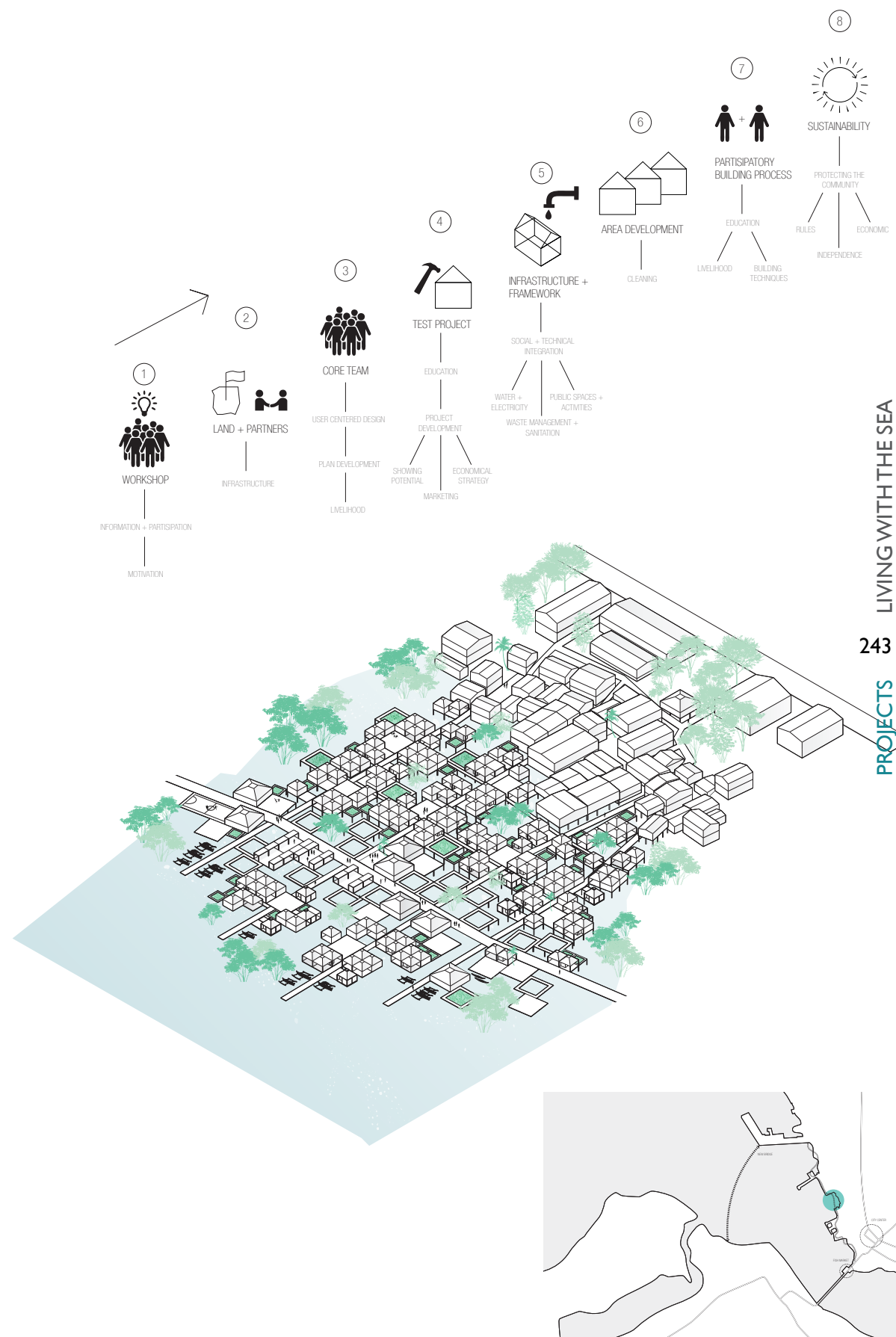
LEFT | Lookout to the informal settlements by the shore. Photo by Hannele Cederström

URBAN SCALE DEVELOPMENT

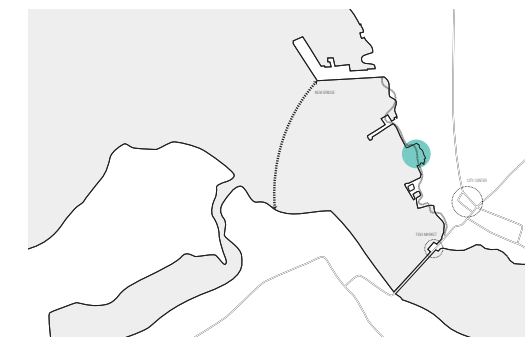
The on-site development starts together with the urban scale seaside development. The most public spaces and structures of the settlement could be partially funded by the city. The funds from the intended resettlement projects could be guided to build the main structures of the settlement. As a part of the seaside development the city is planning to build a seaside promenade, which can be utilized as a part of the settlement development and combined to the public spaces of the settlement bringing base for public activities such as markets, restaurants, sea farming, tourist services and non-commercial services such as public sports facilities. All the sea related activities would help to raise the awareness of the sea as a valuable natural source and to preserve the sea clean. The proximity of the settlements would bring the seaside natural guidance and security because of daily activities by the people living there.



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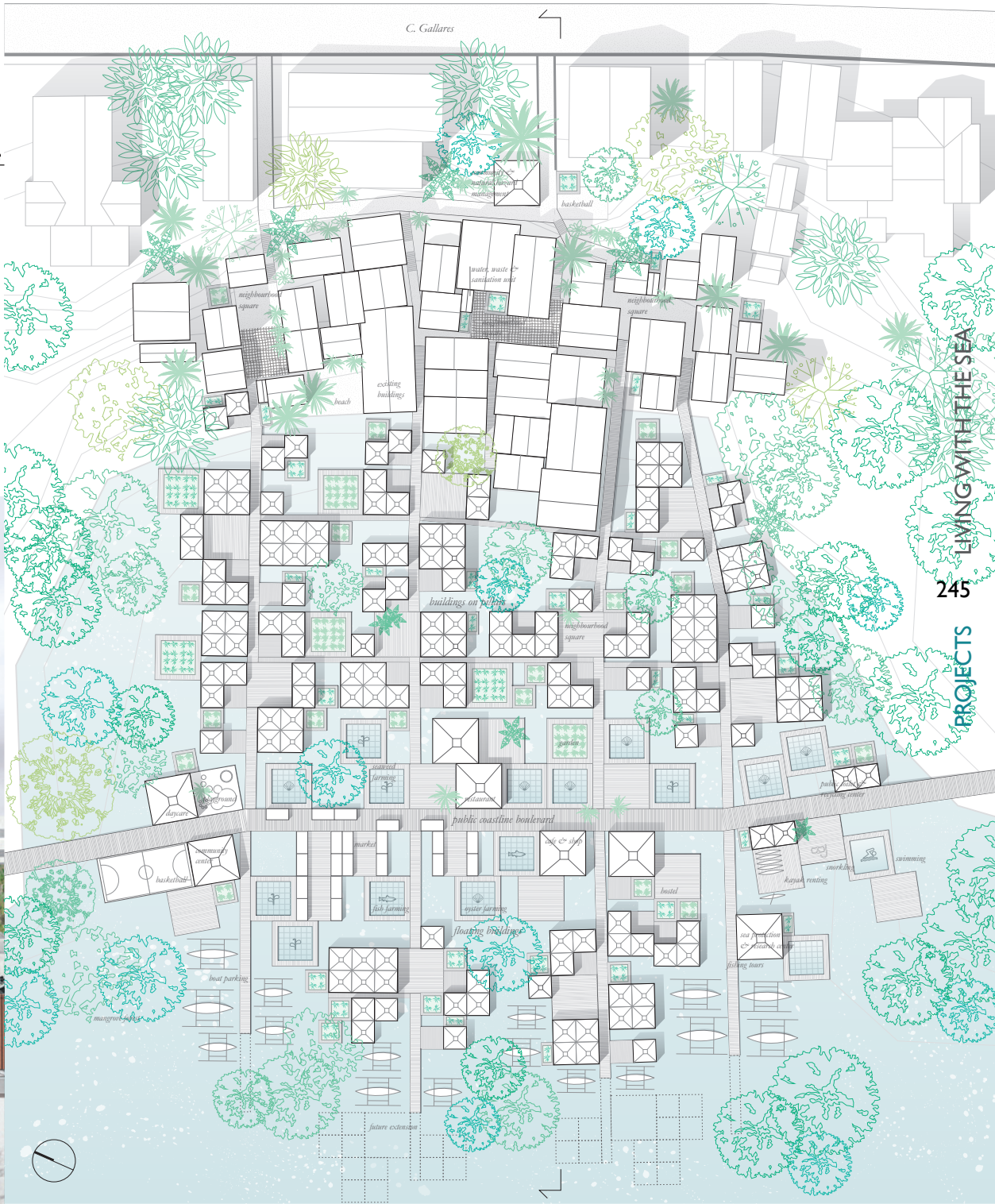


LIVING WITH THE SEA
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PROJECTS





NEW PUBLIC SPACE RENDERING

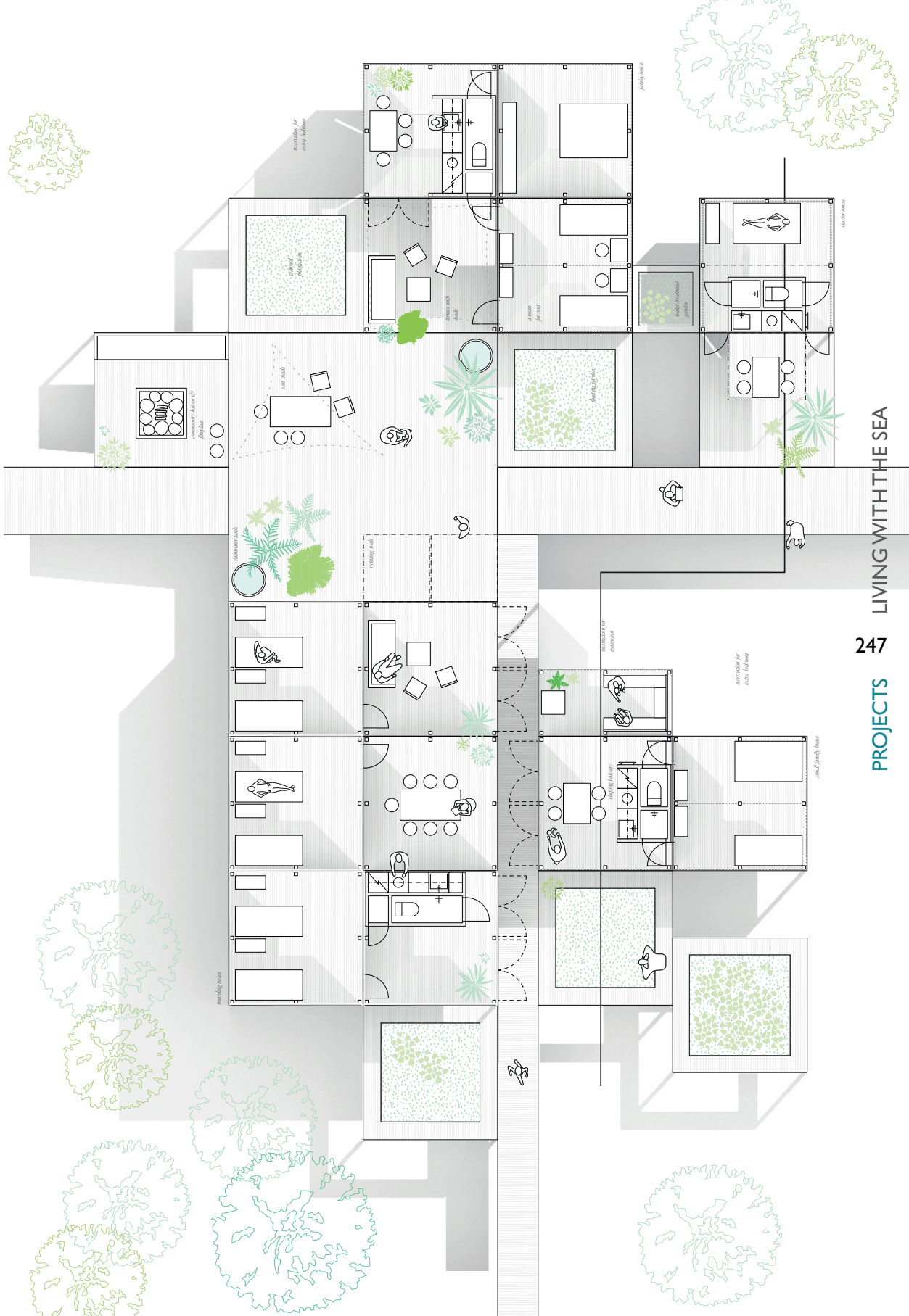
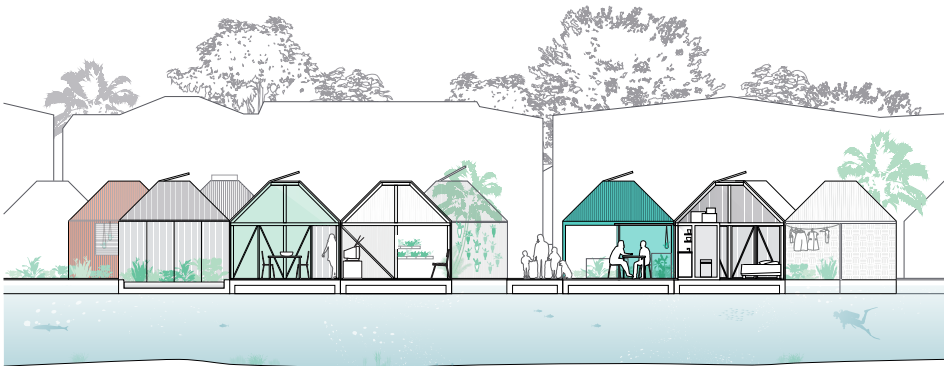


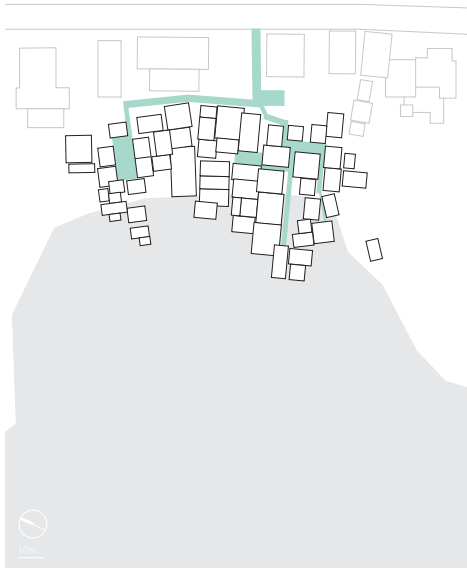
ON-SITE DEVELOPMENT

The development of the informal settlement itself starts by improving the public roads, building seawater pumps to make the area safe in case of fire and by creating a proper waste and sanitation management system. Also a communal emergency shelter center is needed to store materials for rebuilding, to provide storage for individual property during a natural hazard and to function as a community building. After the public facilities the incremental development of the new houses can begin by first removing the weakest buildings and offering the settlers financial guidance and a possible micro loan to build a new unit.

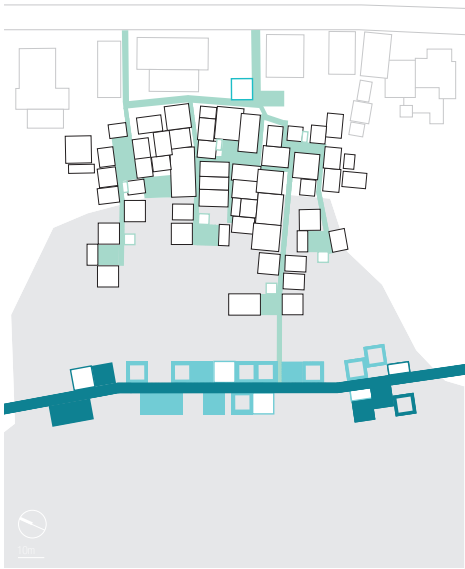
NEIGHBOURHOOD STRUCTURE

The analysis revealed that the settlements consist usually of smaller units formed by big families. These smaller communities inside the whole settlement community are socially important to support the families. Therefore, they need to be considered while starting the development process. The incremental development of one neighborhood starts by first building the public connections to the other neighborhoods and the public spaces such as community kitchen and laundry facilities. The public spaces can be financed with the resettlement funds from the city. At the second phase, the families or individual settlers can start building their own houses by starting with the core unit that is offering the basic facilities; a small kitchen, a toilet and a shower. After that, the incremental development continues according to the settlers own needs and capability to invest for extra units. The individual funding can be organized by a community savings system that permits a type of support for each settler.





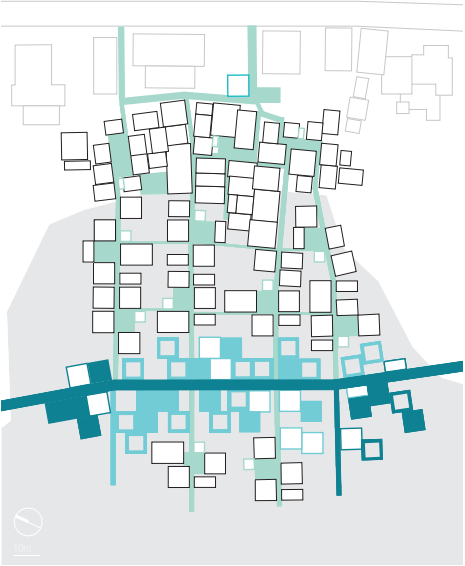
1 Current situation



2 A Improving the current settlement: neighbourhood squares, organizing the community, waste & sanitation facilities, natural hazard preparedness and route system
B Replacing houses in poor condition with new incremental housing system
C Creating a public coastline route with public services and sea related livelihood opportunit



3 Completing new neighbourhoods and creating connections to the public route



4 Extending the area with new floating neighbourhoods

□ OLD HOUSING □ NEW HOUSING ■ LIVING ■ LIVELIHOOD ■ PUBLIC LIFE

HOW TO FINANCE A HOME

1 SAVING MONEY

Firts step to finance a house project is to start saving little by little.

2 JOINING COMMUNITY ECONOMY MANAGEMENT

The residents form saving groups where individual savings are gathered and saved in the community to ensure financial aid for the residents one by one. Collective saving is more efficient and helps managing the money.

3 REFRAMING AND FINDING EXTERNAL FUNDING

Showing the motivation and the will to solve problems together might help to start the communication with the governmental officials and organisations about guiding the financial resources to on-site development.

4 MATERIAL BANK

When the funding is ensured or there is enough savings, the community buys a material bank and gives the saving group members necessary building materials instead of direct money. The material bank is aiding to build the primary part of the house to continue incremental development more independently. It can also provide basic materials to help the community to recover after a natural catastrophe.

5 SWEAT EQUITY

Attending the building process creates higher responsibility for the result as well as helps to show the motivation to attend for the donators.

6 CONTINUING SAVING

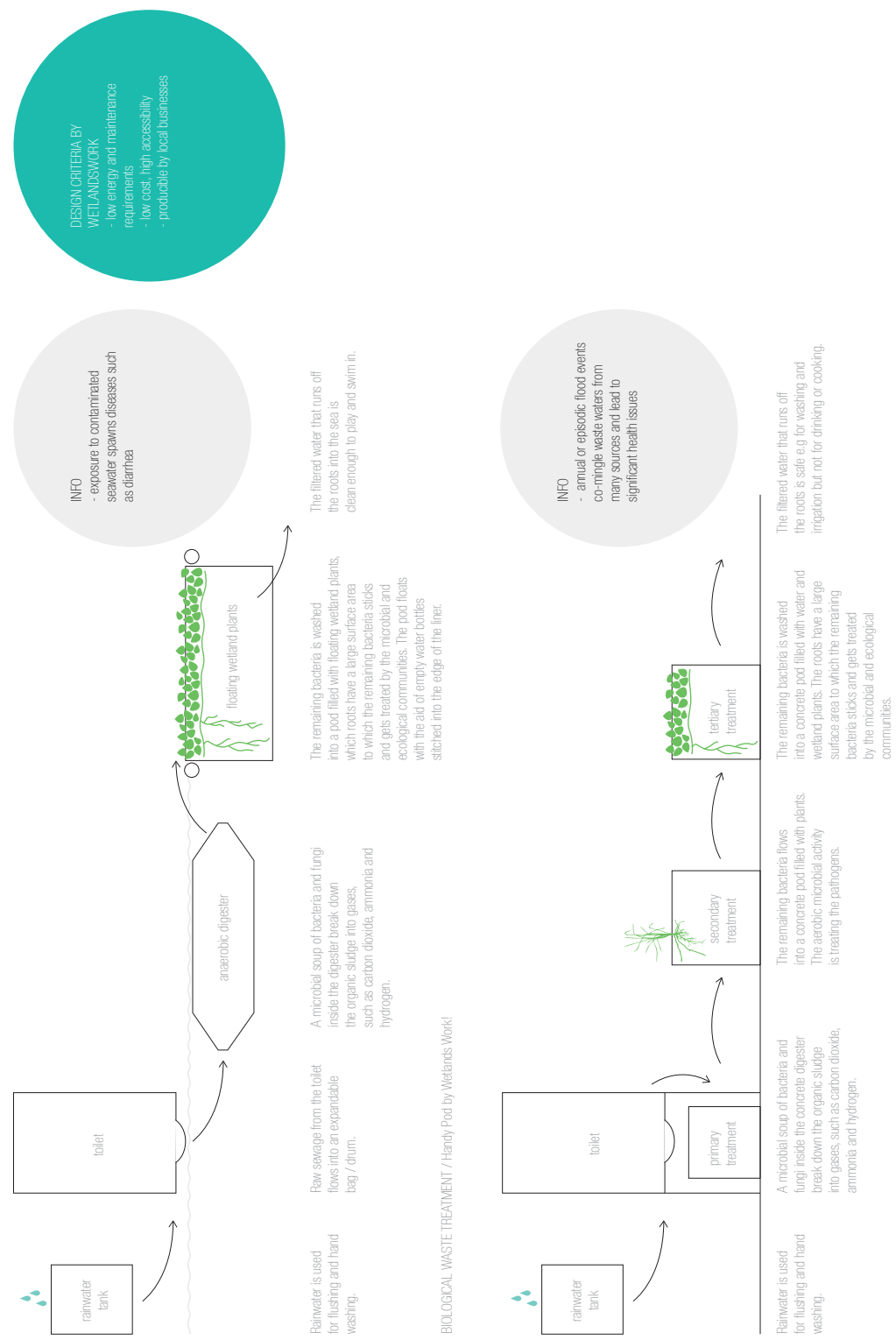
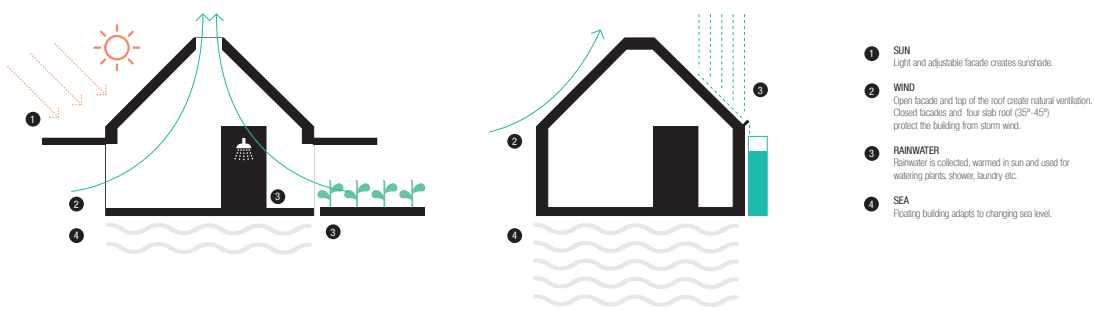
After building the primary part of the house it is possible to gradually increment it by gathering new savings or finding a reliable micro loan. Also entrepreneurship is an option to gather more savings.

BUILDING SCALE: STRUCTURE AND SANITATION

The biggest challenge of the structure is the natural hazard resilience. Other objectives are sustainability, use of recyclable, eco-friendly and renewable materials, climate as well as spatial adaptability.

The building design principle is to create a strong and resilient structure that can be covered with lighter recyclable materials. The structure is a lightweight steel frame, which is easy to assemble without the use of machines or special techniques. Wet joints are avoided to maintain the recyclability of steel frames. A simple regular shape helps to avoid concentration of wind pressure. The steel frames can be covered with any lighter material available to create the actual walls and the roof. The variety of materials brings forth the opportunity for self expression, even the form of the building is repetitive. The units can be built on stilts closer to the shore but further along the floor a floating concrete slab can be covered with lighter materials. The roof is angled 30° to 45° to prevent it being lifted off by the wind (Development Workshop, 2016). The roof is shaped as a pyramid cut from the top to create natural ventilation as the hot air will raise and create flow through the roof top.

The basic unit is sized 4 x 4 m and it consists of a concrete core with basic kitchen facilities, a toilet and a shower. Each core unit is also connected to either its own or shared water management and to a 'Handy pod' that is completely maintenance free and purifies the waste waters with plants (Wetlandsworld, 2016). The housing units can be combined to create adaptable options for different needs. Nevertheless, one single unit with the core offers basic facilities for living. The walls can be opened as doors and lifted up to create shade for terraces. The units can also be combined to create a sequence of different spaces from public and shared terraces to more private and closed spaces of the home such as bedroom and sanitation facilities. The floating units can also easily shift from one place to another which makes the units more adaptable for changes and development over time.



BIOLOGICAL WASTE TREATMENT / Flood prone sanitation by Wetlands World

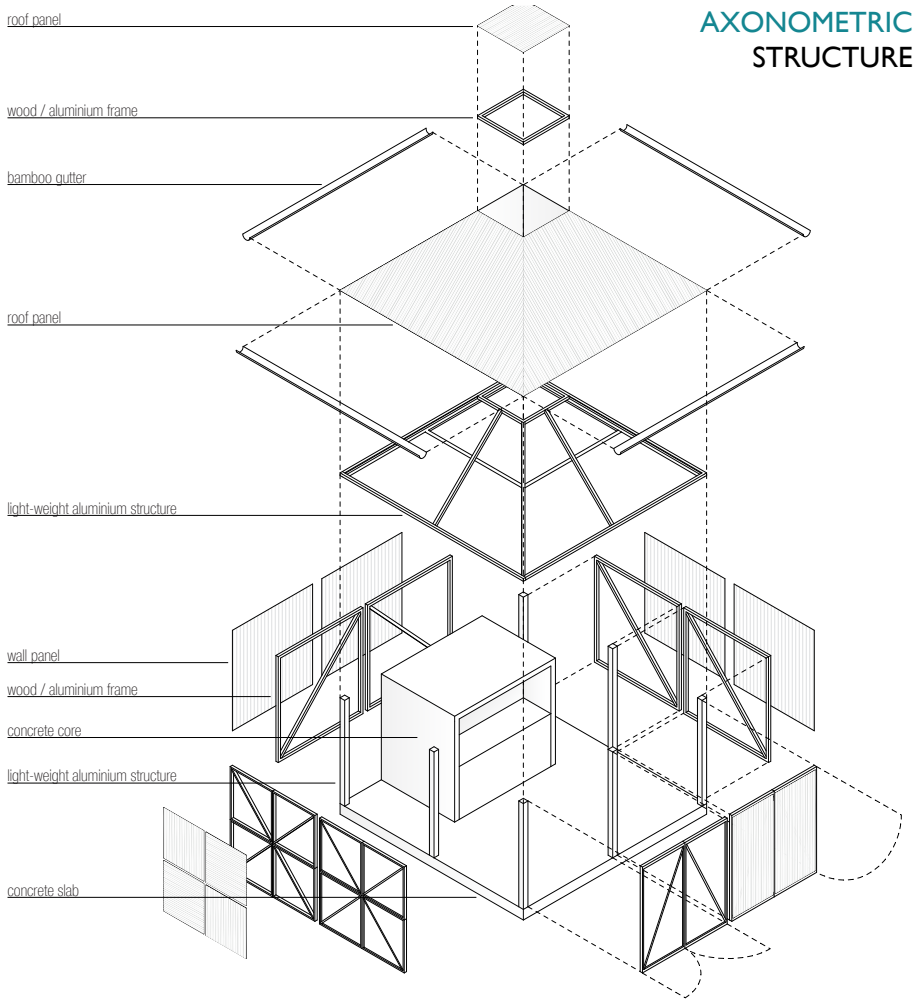
FINANCIAL PROCESS

Any low-cost development process needs to be well planned beforehand to ensure the participants can afford the project. Taking care and maintaining the already existing livelihood of people is crucial as well. In case of creating new businesses and income possibilities such as tourism services, first providing them for the needs of the locals creates the most sustainable base for continuity.

The financing process can be roughly divided in individual and communal financing. The first step of both is to start an organized savings fund. The community savings are based on smaller saving groups and an organized bank that collects the savings and gives the monetary aid for each group member one by one. To get possible external funds and negotiation position with the city, reframing is needed to change the attitudes. Showing the participating will of the settlers might help persuading and convincing the financiers. The external funding possibilities are different organizations, NGOs, the city and different pilot architecture projects. After ensuring sufficient amount of funds, the community material bank is created to provide the basic building materials.

BUILDING PROCESS

The on-site development process starts with workshops to motivate and organize the community to collaborate with government officials and to find skilled persons to take responsibility for the process. The next step is negotiating about land ownership to get legal rights for staying. When the funding is ensured, a core team is selected to start developing the actual housing project and to study the livelihood options. By implementing a test project the design can be effectively and easily tested to develop it further. Furthermore, it can be an educational tool to share both new building techniques and combine those with the local ones. After, or even together with the test project, the actual area development can begin by cleaning the site to arrange proper sanitation and waste management, to arrange water and electricity connections and to start building and upgrading the public spaces. The participatory building process starts by educating the settlers to ensure the same resilience principles of the structure. The education can also include new livelihood possibilities such as sea farming or entrepreneurship. To ensure socially sustainable process it is important to maintain the community socially organized. As the practical process is finished the community needs to create norms for living to avoid social problems. It is also crucial that the community can stay as independent as possible to have the same rights and to avoid segregation.



MATERIALS

CORE & SLAB  CONCRETE	STRUCTURE  LIGHT WEIGHT ALUMINUM	NIGHT FAÇADE  TRANSLUCENT		
ROOF & WALLS BAMBOO MAT	WOOD PLANKS	BAMBOO RODS	POUNDS PALM LEAF	POLY-CARBONITE PANEL



LIVELIHOOD FROM THE SEA

Preserving the strong tradition of getting the livelihood from the sea is a part of the sustainable design process. Possibilities to work close to home empower women by offering alternatives to the current model where men often provide for the family. Raising environmental consciousness and financial profit from a clean sea can motivate to take better care of the seaside environment. Furthermore, bringing new activities along the coastline can attract other social groups and encourage them to share common activities with the settlers.

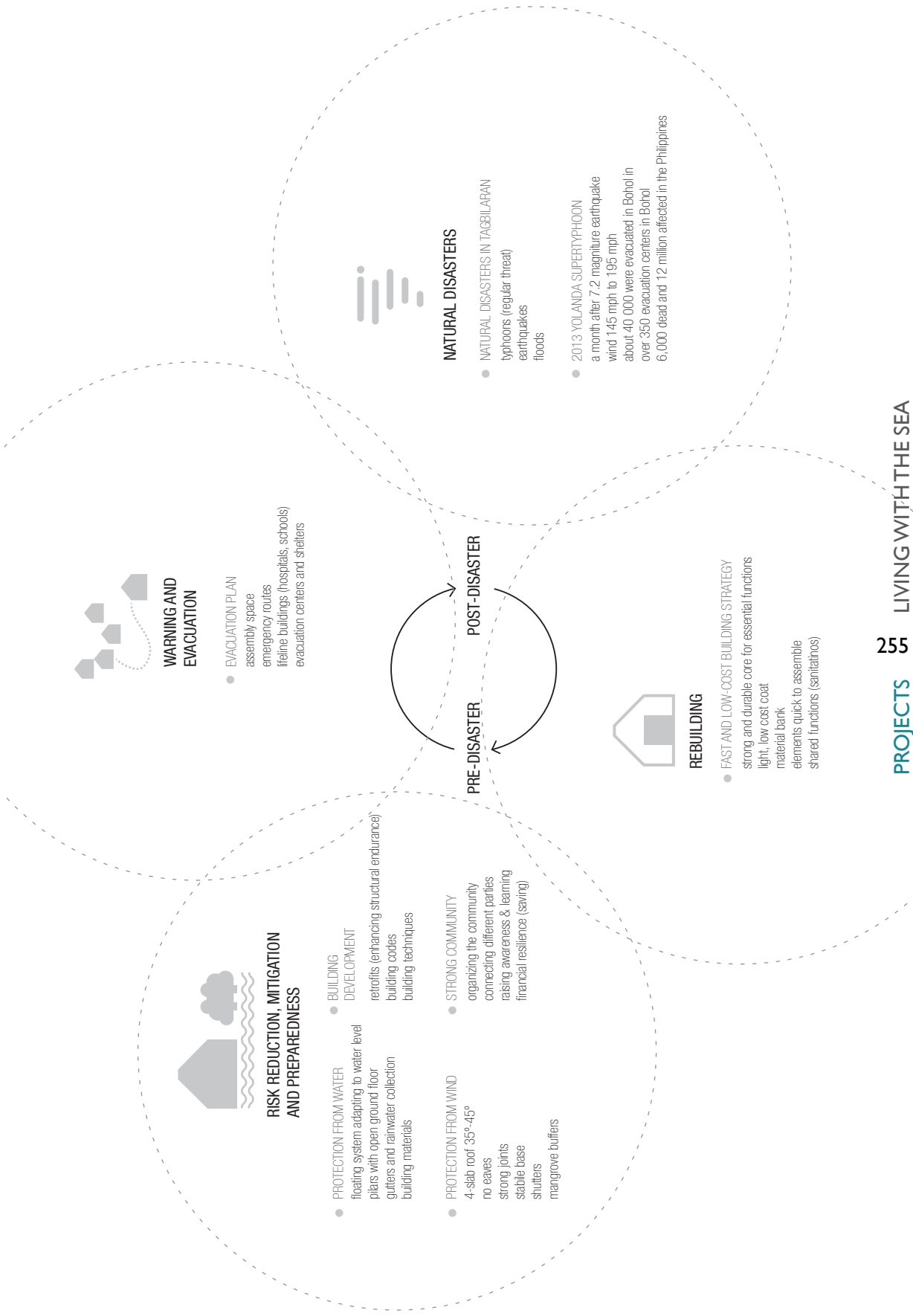
Sea farming is an efficient method to produce food such as seaweed, fish and oysters for the needs of the settlers and selling. Furthermore, growing oysters and seaweed is beneficial for the ecosystem by purifying the seawater (Greenberg, 2013). The cleaned water provides new possibilities for recreational activities such as swimming, snorkeling, kayaking and boat tours. The sea farming products can encourage small entrepreneurship businesses such as setting up restaurants and marketplaces.

Continual and public water research and guidance are important to promote the better image of the sea and to give clear proof of the safe and clean water.

NATURAL HAZARD RESILIENCE

Philippines has recently introduced laws concerning the natural hazard protection zones along the coastline (Juino, 1976) because the hazards, especially typhoons, are a threat that occur each year. Thus, the resilience also needs to be based on a proactive and ongoing process.

In a case of onsite development, the resilience can be achieved by means of an efficient warning and evacuation system, rebuilding techniques as well as risk reduction, mitigation and constant preparedness. The evacuation plan needs to include an assembly space, proper emergency routes, lifeline buildings such as hospitals and schools, evacuation centers and shelters. Fast and low-cost building strategy is a key for the rebuilding. In the project these are achieved by strong and durable core with the essential living facilities, light and low-cost coat and by quick to assemble elements. Also communal material bank and other shared functions such as sanitation facilities make the rebuilding efficient. Furthermore, building development and protection from the water and storm winds as well as strong, organized community are crucial for the risk reduction. (Development Workshop, 2016)



IV. CONCLUSION

To achieve the themes that the project is addressing, the first thing would be to collaborate, activate, listen and discuss with the settlement community. Thus, a critic for the project is self evident. Any of the steps would not be possible to reach without the involvement of people who would be affected by the project, both the settlers as well as the city officials. A hypothetical project as this one can be used as a tool to study the different phases of a possible tangible project. But to bring the ideas into reality would require creating a tight and confidential connection with the affected community.

LIVING WITH THE SEA | FINAL RENDERING



9

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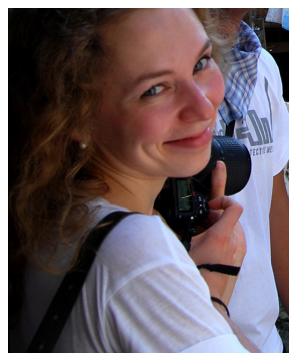


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BARANGAY

Barrio or district.

CARINDERIA

Local eatery selling and serving menus during lunch hours. Customers point what they want to eat from an array of cauldrons and eat on the premises sitting on wooden benches or plastic chairs.

INFORMAL SETTLEMENTS

Housing units where occupants (informal settlers) have no legal claims over the land since they do not have ownership of the land. These units are often built disregarding city regulations.

JEEPNEY

Most popular means of transportation in the Philippines for public transportation. Known for their crowded seating and folkloric decorations. Jeeps are a symbol of Philippine's culture and art.

LIVEABLE

Has to do with urban resilience. A liveable space caters to human needs by increasing the standards of living for those who make use of the space.

MAAS

"Mobility as a Service" was first formally described in a publication by the Finnish Ministry of Transport and Communications (2014). MaaS adopts users (or passengers) as part of the implementation strategy for public transportation. Data is uploaded in real-time through an ICT-assisted application by the users. An example of this service is Uber.

MALLING

The activity of passing time in a shopping mall.

MULTICAB

Small light truck similar to a jeepney used for public transportation. They have fixed stops and routes. Riders pay a fixed amount to ride the multicab.

NGO

Non-Governmental Organization. Any non-profit, voluntary citizens' group which is organized on a local, national or international level. This organization typically carries on humanitarian functions.

PLACEMAKING

Capitalizes on a local community's assets, inspiration, and potential, with the intention of creating public spaces that promote people's health, happiness, and well being.

RESILIENCE

In the context of urban planning; refers to the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience (Resilient Cities, 2016).

SARI-SARI

Similar to a typical convenience store. Sari-sari means "variety" in Tagalog.

SEGREGATION

According to the United Nations, "when a lifestyle, economic class, ethnicity or some other group identifier becomes a limiting factor of your life." Ethno-cultural segregation refers to a group of people who exclude willingly from others in order to feel safe, part of a community and to avoid racism (Dahmann, 2016).

SIESTA

An afternoon rest or nap, especially taken during the hottest hours of the day in areas with a hot climate

STREETWATCHER

Concept first introduced in the 60's by Jane Jacobs which refers to individuals who serve as "guardians" on the street (or "eyes on the street") by carrying their daily patterns of life. "Streetwatching" helps to keep the neighborhood safer by spotting those who "do not belong".

SWOT ANALYSIS

Looks at strengths (S), weaknesses (W), opportunities (O), and threats (T). This tool has been used for some strategic planning strategies across the globe.

TRANSPARENCY BOARDS

Bristol boards placed in the lobby of City Hall with documents containing important public information about the current and future changes in Tagbilaran.

TRICYCLE

A form of auto rickshaw that is used as a common means of transportation in Philippines. Services provided by tricycles are most commonly for-hire, similar to taxis.



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Dr. Perez/Dr. Castil (BISU)

Egagamao, C. (2016) Interview with the Seaside neighborhood association president

Estella B. Margate (Tagbilaran City Engineer)

Real,A. (2016) Interview with the Barangay captain

German Torero (Dean of Architecture, University of Bohol)

Governmental level officials of Tagbilaran

Interviews with informal settlement residents (Lady 44 years, lady 54 years, woman 20 years, man 26 years, students in boarding houses and others)

Jeremy Miro (Traffic Supervisor, Tagbilaran City Traffic Management Office)

Jesus Acullador (Dean of the College of Criminology and former Traffic Planning Consultant for Livio Saravia (City Assesor) Tagbilaran, University of Bohol)

Linda Paredes (Tagbilaran City Program Coordinator)

Livio Saravia (City Assesor)

Residents of Tagbilaran

UNHabitat officer in Tagbilaran

University staff of Bohol University and BISU

All interviews were conducted by the contributors of this book during the study trip to Tagbilaran on January 2016.



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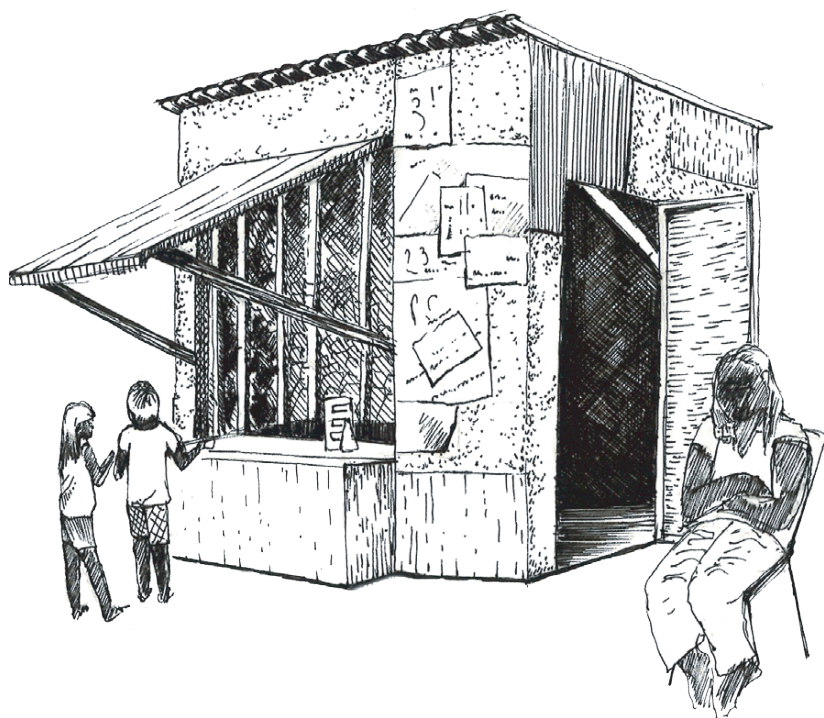
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RIGHT | Final exhibition at the Museum of Finnish Architecture
Photo by Juho Haavisto





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